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# 1942

# SIERRA CLUB

# OUTINGS



GOOD MORNING!

Little Five Lakes by Charles Townsend



Members of the Sierra Club Three Camps and Base Camp trips intensively explored the Great Western Divide and the watershed of the Big Arroyo, this summer. In the past this scenic territory has been passed through rather hurriedly at the start or end of the High Trip, but this summer all camps were located within a limited area on the eastern flanks of the Divide.

Mineral King served as the jumping-off spot for both trips and proved scenically spectacular as well as historically interesting. The Three Camps group crossed over the snow blocked Franklin Pass to their first camp at the gem-like Forester Lake. From here, Shotgun Pass, Rattlesnake Creek were visited and a half dozen unclimbed peaks were assaulted.

The next camp was established in the lower end of the Big Arroyo after a rough trip down the little visited Soda Creek. From here side trips were made by large parties to Moraine Lake and the Chagoopa Plateau. The final camp was set up on the shores of the middle of the Little Five Lakes, facing the rugged Kaweah range.

From here, daily trips were made to the Big Five Lakes, Nine Lake Basin, Kaweah Gap, Precipice Lake and to the numerous un-named creek and lake basins to the north. On the way out, the party divided into two groups, those who preferred to spend two days going over Black Rock Pass, Pinto Lake, Cliff Creek and Timber Gap and those who took it in a single day through the muchly heralded Lost Canyon, past colorful Columbine Lake and over Sawtooth Gap.

The Base Camp members entered the mountains over Timber Gap and Black Rock Pass and came out in the same manner as the Three Campers did. Their two weeks stay was at the same site on Little Five Lakes. Some fifteen, remained in camp between the two outings under the leadership of Elsie Bell Earnshaw.

The Base Campers covered all of the scenic spots that their predecessors had, but managed to get in more mountain climbing. In addition, botany and geology trips were organized by John Thomas Howell, who collected some 800 specimens for the California Academy of Sciences. Fishing was excellent on both trips, with daily limits of fair-sized trout being the custom.

On both outings, the campfires were extremely interesting with good music, excellent talks and unusual skits. There were the usual entertaining, tea parties, bandanna shows, flower shows, luncheon trips and moonlight hikes. Food was unexpectedly fine, with Martin Brady doing the cooking for the Three Camps and Dean Curtis heading commissary for the Base Camp.

OLIVER KEHRLEIN

# MINERAL KING--THE PAST

By Delee Staunton

A tantalizing name, old weathered cabins, bits of mine machinery and deserted mine shafts were but a few of the things that aroused base campers to curiosity concerning their first camp at Mineral King, 7800' up in the Sierras. Dr. Alan McCrae gave a vivid campfire talk on the dramatic ups and downs of this historic region, and this was supplemented by Ray Buckman in the days that followed.

The area was first discovered by white men in 1872, when J. A. Crabtree built the White Chief Mine and extracted the first ore. There was an immediate gold rush over the trail from Three Rivers; everything had to be packed in, including the machinery for the sawmills, smelters and other necessary equipment. The roaring miners' camp of Beulah was exceedingly busy during 1874 and 1875, and in the latter year the miners voted to change the name to Mineral King. Bad luck followed soon after, for the New England Tunnel and Smelting Company, owner of most of the mines, failed. The gold boom abated suddenly and Mineral King practically became deserted.

In 1878 the Empire Mine was opened, and the second gold rush again filled the valley with miners. This time there was to be a road--the Tool Road. Two hundred men worked on it, with half starting from Three Rivers and half from Mineral King and a grand celebration was held when the two groups met in August 1878, only five and a half months after starting. Nearly one hundred and fifty outfits were waiting for the road to open, and by the fall of 1879 there were three thousand people in the valley. A quartz mill was completed and a tramway from the mill to the mine on Empire Mountain was erected. A road was built over Timber Gap. Three sawmills supplied the area, and there were six hundred houses in Mineral King alone.

Particularly interesting was the year-round daily mail service. Stages were used as long as possible, then sleighs, and when the going got too bad snowshoes were resorted to. Three six-horse stages left Visalia every morning and three left Mineral King, each making sixty miles in one day. One stage carried mail, another carried passengers and whiskey, and the third was a fast freight, carrying 1500 lbs. Mail was six cents per lb.

Prospecting went on day and night. Every mine owner had one pack and one riding horse, and one thousand head of stock were pastured in the valley. Despite the seeming prosperity the large Empire Mine became increasingly expensive to run and owner Tom Fowler started to San Francisco for financial aid. History might have been different if he had not been killed while boarding a train. His heirs were not able to carry on his mining interests, and thus ended, in 1881, the second and last mining boom.

Gradually the old town became a center for summer vacationists and mining was pushed into the limbo of the past. The mountains were forced to yield gold, silver, copper, zinc and antimony. However, there may be another period of mining in the history of Mineral King. State minerologists are considering the extraction of lead and zinc if operating costs can be kept low enough to make it worthwhile. War may mean economic revival to a site which has already seen more periods of alternative activity and desertion than many another.

## STREAM IMPROVEMENT OF THE KAWEAH

By John D. Cassel

Perhaps everyone noticed some of the artificial dams placed in the East Fork of the Kaweah River between the Mineral King store and the Sierra Club camp and wondered how they got there.

In 1935 the U. S. Bureau of Fisheries and the U. S. Forest Service became interested in "Stream Improvement" as practiced in the eastern U. S. They hoped to "improve" very available and much overfished streams so that they would yield more trout to fishermen. The Kaweah in this area was chosen as a demonstration stream to try out various types of stream improvement structures. The flow is relatively constant, the stream is very accessible and overfished, and there was too much ripple in relation to quiet pools for optimum fish conditions.

Therefore about October 1, 1935, I was sent to Mineral King to do the proposed work. Sites for structures were chosen after making a careful study of the stream, and a CCC "Stub Camp" of about 30 men was established just below the site of the Sierra Club camp. The Forest Service supplied materials and equipment. Logs were obtained from a place about a mile below the Ranger Station, and hauled by truck to the site. Rocks for rock dams were found in abundance locally. Work was completed by the middle of November, at which time the water became too cold to work in. All together about 50 structures of many different types were installed.

A rapid inspection during the Sierra Club trip showed that the log dams were all in place and functioning as expected, although many of the rock structures were no longer perfect. Whether fishing has been improved during the past seven years I am unable to say.

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## THE OVERTURNED TRUCK INCIDENT

The difference between a Los Angeleno,
(Or is it a Los Angelcheeso?)
Where they invented bingo, screeno,
And let you win, if they should please so,

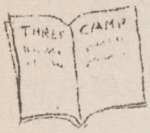
And natives from fair S. F. Bay
Who study nature, be it flowers, stars or ducks,
Do, as some did, here on the way,
Studied it from both on or under trucks.

W.J.H.

# A FRESHMAN LEARNS THREE CAMPING THE HARD WAY

## Culled from Julia Gross' Daily Diary

May




The Sierra Club Bulletin has just come, and I am thrilled with the trips scheduled for this summer. At last I think I can make it. Probably the Three Camp Trip. For a long time I have been wanting to go on a High Trip -- even back in the days when I use to study the stones in the Mazama Fireplace, frequently examining the big granite block from the Sierra Club. I thought then that someday I should surely go with them to the mountains from which that rock had come! And now the time has come!

June

Shopping for the Three Camp Trip! What fun it is to hunt for just the very right article for my so-selected equipment. A new down sleeping bag, umm! socks, jeans, raincape, ground sheet that I can stretch up for a shelter against rain, etc., -- advice from everybody who has ever gone on a High Trip-- and what a lot I get, along with a heap of enthusiasm! -- sunburn creams and lotions until I have enough to keep the whole camp beautiful.

I go on several good conditioning trips this month, including a climb up Old Baldy.

Get-together dinner on June 30. I meet nice people, and enjoy good food, and get further good advice!



July 11, Saturday



There should have been some trumpets and horns to waken me and announce this long longed-for day, when I hopped early out of bed and hurried off to the train on the beginning of this trip. Oh, well, even if others didn't hear the music, I did within myself! The train ride was cool and comfortable, and I again met some of those who are going on the trip. At Visalia we piled into Ray Buckman's big truck, sitting upon duffel bags, and hanging on in any fashion we could. There were seventeen of us, from L. A., the Bay region and elsewhere -- a lot of nice people, whom I shall enjoy getting to know better during these two weeks. We speed along to Three Rivers, old familiar ground this far. But then we turn off and begin to climb, up and around the mountain sides. We look down to a dashing mountain stream far below, and up ahead to high mountains, and trees. After we have whirled around curves and curves for a long time, someone cries, "Oh! There is Sawtooth!" There it was, far ahead and much higher, a sharp jagged peak. The "knowing ones" get some special thrill at recognizing this particular bit of mountain, as I can tell from the warmth of their tone. But I am not yet of their inner band. However, two weeks later when I must bid that sharp outline good-by, and will watch it fade from my sight as I whirl down the mountain, I too will belong to the inner brotherhood myself!

At a camp, a mile above Mineral King, we are welcomed by those who have already arrived, -- by Oliver Kehrlein, and Herbert Breed, who register us and give us our spoon and jam jar. Then we eat! Yum! chicken, and ice cream! Finding our campsite comes next. I am so glad to have Helen to guide me and give me pointers on how everything is done, so that I can quickly fit myself into camp routine. Helen and I find comfortable spots for our beds near a big log beside the roaring stream. I shall love sleeping here, where I hear the water flowing by all night, and can look up at the stars, and smell the sweet



mountain air.

We have our first campfire. I get my first sight of Oliver in action. After seeing his enthusiasm and experiencing his geniality in swinging us into the same mood, I begin to comprehend why our trips were not given up this year. We get a lot of introductions this evening, -- to Dr. Peg Carlsmith, our official doctor; to Herbert Breed, old and tried mountaineer, who tells us the history of this country; to Gordon Wallace, the Forest Ranger for this district, who welcomes us to this beautiful mountain area.

July 12, Sunday



Oh, it's grand to wake up this morning and find myself really here in the mountains, -- the smell of the pines, the blue light as night fades out and morning comes! I have missed much, but now I am home again.

After a grand breakfast, groups start out for hikes or for fishing. I go along with Bob Schonborn's party to hunt for the White Chief Mine and to Eagle Lake. Maybe I'll go only part at least, to get my muscles to working for the trail tomorrow. Along the way we pass such lovely flowers. I am entranced by languid lady, and lupines, and by pentstemon or phlox growing in the crevices of the grey granite ledges. We don't find the mine, and I don't reach the lake, but it was a good day just the same, and I had my first tea-party! That custom, which I had heard mentioned almost with bated breath by all High Trippers, seems to justify all that has been said.

Campfire. Many instructions about the trip up over Franklin Pass tomorrow; and advice from Dr. Peg on how to take care of one's self in the mountains. But I thought Oliver's advice along that line a little pointed when he said, "Get behind someone obese and follow at his pace!" I bet there are not going to be many blisters, -- confessed, at least! My heels are pretty tender. I am just hoping I am not the one to get caught. And we hear about "cortin," the substance which controls our reaction to high altitude, and rapid changes in altitude. Here's hoping Old Baldy has helped to build up my supply. Pierce Spinks brings out his violin and plays for us as the sunset glows red upon the high walls about us; and as it fades we feel wrapped in a deep mood of beauty and high anticipation of what is to come.

July 13, Monday

At 5 o'clock the early call rings out when the sky is barely light, and all around me I see figures beginning to turn over or sit up in sleeping bags; rather an eerie impression, like the stirring of gnomes in some enchanted forest.

I stuff my bag and safely maneuver it across the stream over the two slippery logs, and drag it up to the weighmaster, who pronounces it overweight! So out comes my cosmetic case. I had hoped I wouldn't have to carry it myself, but oh! well! --- Breakfast over, I check once more the contents of knapsack and start up the trail. This is another thrill as it is the real beginning, -- at last we are to see the Promised Land, but I only hope the trail is not going to be another wandering of the Children of Israel before we are allowed to enter!

Slowly and steadily I climb, through brush and timber, and over open rock-strewn slopes, up and up. Ah! there are the Franklin Lakes. How lovely they

are in their rugged, severe setting of shear granite walls. There is something so clean-cut and austere about these little bits of water in such surroundings; they lift one so in thought and spirit -- already I am feeling release "far from the madding crowd." Franklin Pass. Hooray! 11,400 feet elevation. I'm higher here than on Mount Hood; and Mount Whitney is the only place I've been that is higher. As I top the final rise, what a panorama opens out -- it is the Promised Land for sure! Such sweep and grandeur and tremendous mountain scenery, to catch one's breath and to thrill one down to the hob-nails and up to the wildest-flying stray lock! One look and who of us does not know why we climb mountains? Mount Whitney, LeConte, Muir, Langley, and what a list more, we see far on the other edge of the range, the Kaweahs in the middle distance; but all of us look particularly down into our own portion of these mountains, where we shall be for the happy days ahead. Forester Lake, set like a jewel in a green ring of greensward and trees backed by barren mountain walls, invites us down to our first camp. It looks near, but as I watch the first of the group go zigzagging down the trail, growing smaller and smaller, I realize there is greater distance than first appears. I follow after I have had a good rest, eaten my first jam sherbet, and filled up with the view. Down over gravely slopes, to Rattlesnake Creek, which is a clear, madly-dashing mountain stream, along which are green meadows, clustered with shooting stars, large but delicate in color and shape, massed and scattered in masterly landscaped fashion. Farther along we pass through woods of Lodge Pole and Fox Tail Pines, strewn with huge boulders. Many of the trees look twisted as if struck with lightning -- perhaps it's some disease.

There is one delightful break on the way down, when I am hailed by a group making tea by the water's side, in a regular little park. I sure do like these tea parties! And how I like the people I meet at them. We are joined by others and have a nice hour, chatting and getting acquainted and drinking tea. Then on we go to camp; how pleasant it is to suddenly come out on the lake!

In camp Helen and I find good bedsites under trees beside the lake, and here we make ourselves quickly at home. A swim in the lake and then dinner! And are we ready for it! As I fall in line and proceed according to the camp procedure, I begin to feel as if the newness were gone and I have at last become an old-hand at this business of High Tripping. I get my soup and eat it while waiting in line for solid food. I come back for seconds. I find the "chicky pail," etc.

At campfire Patsy Taylor takes us in hand for the singing which goes better tonight than before, and we begin to draw closer together. Put and Bart of commissary sing a duet -- Put with such an infectious grin to top off his long size, and Bart so romantic in his big black hat and very, very gay shirts! Gordon Wallace tells us some more of this country -- of the special beauty spots which we are to see. Joe Sharp breaks into our mood, however, when he jerks us back to the outside world with his news broadcast. Even the war, though, seems somehow far away and of less importance in the midst of the beauty we live in here. Helen and I steal away while the singing is still going on, and the light of the fire glows through the trees as we return to our own little part of this beauty. It is hard to shut our eyes on it, -- the stars through the trees and the shimmer of water in the lake.

July 14, Tuesday



Today is lazy day for most of us -- to stay here and enjoy the beauty of this spot. First we wash (what a demand for buckets, and what an array of shirts and socks, etc., that are spread in the sun to dry.) I find that my socks have acquired a permanent stain -- my feet perspired so and the inside of my boot left lasting marks. (But no blisters!)

Some of us go back up the creek for lunch. We find a likely spot where the water dashes over boulders, one big flat fellow at the side just right for our fire. Later, picture-takers depart for serious business, and the rest of us nap, and then return lazily to camp.

Campfire tonight brings out some good jokes, but I think we all agree that Herbert Breed has the best -- it will be hard to match his both for the story itself, and for the histrionic skill with which it is told. We all fairly itch and want to scratch too in sympathy as he details the discomfort of Bill and Pat, afflicted with their cooties. Pierce plays for us again; this is another perfect spot in which to listen to his beautiful music. While he plays, we look out over the lake to high mountains, where the sunset touches everything with color, and then gradually fades into soft twilight, to finally warm the enveloping darkness. The little new moon comes out and hangs delicately above the trees, which are themselves reflected darkly in the lake.

July 15, Wednesday

The ambitious go hiking today. There are trips led by Dodo, Peter, Weldon -- and even Oliver goes out to climb his "kitchen-window peak," though he finds it a snare and delusion, a pushover, as he tells us later at campfire.

I get in a turn at commissary. What mountains of cabbage to shred, and lunch meat to slice! It is fun though to stand back of the table as the line progresses on the other side.

July 16, Thursday



Again the early call, which is taken up and passed through the woods in weird echoing fashion, with lake so mirror-like and the sun not yet touching the tops of the peaks around.

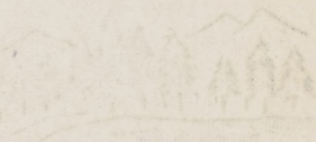
Along the trail: Bits of conversation and stories are interesting as I join one group or another for a while on the trail. We climb over the ridge and down past Little Claire Lake, another little gem, crowded in its trees up against a rocky wall; and then on down a steep slope to Soda Creek, along which is an easy gradual trail. Just as I reach the creek, I get stuck. I can't make "mind over matter" work to control my shaking knees and force my feet to go on across the slim little log which spans Soda Creek! While hesitating and contemplating the nice bath I feel I am in for, along comes Oliver to the rescue! "A rope in the hand is worth two on the saddle" -- or in other words it's a GREAT MORAL SUPPORT!

July 14, Tuesday



July 15, Wednesday

July 16, Thursday



After a bath in a secluded spot, I go on a ways, to join a nice tea party group for lunch. And on again, -- I come upon several people gathered around a porcupine, busily chewing the end of a stick and making a whining mew, something like a kitten's. What a fuzzy, wind-blown bob he has, sticking out around a cunning little face, and tiny hands and feet.

On the Big Arroyo, the logs are big, no qualms to cross, and I am soon in camp, to find that Helen has already chosen our bedsites, with soft pine needles beneath, rocky ledges for dressing tables, but --- ants and mosquitoes are there to keep us company! Our camp is in a grove of big old trees, in the bottom of the canyon, with walls rising straight up for 1500 feet!

Campfire brings us tempting accounts of Chagoopa Plateau which is located up on top of the 1500' walls of the Arroyo. "Great" Scott (Benson) tells us stories of the Colorado Desert and of Arizona. I enjoy his stories, even though they transport us to such a different terrain. Patsy and Spinks have worked up a quartet which is functioning very well by now; and we are learning Sierra High Trip songs, until we can sing them with pleasure and gusto! They are nice to listen to, after one is in bed.

July 17, Friday



Chagoopa Plateau! Jack Vogtmann leads a group of us along a trail nearly straight up the canyon walls. But the place is worth the climb, and worthy of all that had been said of it. How beautiful the sudden opening through the trees revealing Sky Parlor Meadow, with one end so blue with lupine it looks like water, and looking across the meadow to the band of trees skirting the long slopes of Mt. Kaweah, which reach up to 13,816 feet. At Moraine Lake, in the midst of the forest, we have a delightful swim, after which lunch tastes especially good! We wander on down the trail to find the lookout from which one gets the sweep up and down the Kern River and the Arroyo. Coming down is harder than going up, as the loose rocks feel very insecure under foot on the steep trail.

Back in camp today the bandannas are on display. I am late and miss the best part of it, but still can admire those left, and the gay and gorgeous ones are awarded prizes at campfire. What a lot of special bandannas Elsie Bell does have, but I am sure we all rather envy Peter, his lovely one in those soft yellow and tawny shades, and especially as it displays our own beloved mountains batiked on the silk. Another part of campfire is the report on Margie, that notorious young woman of many High Trips. Indeed I am glad to know she didn't miss this trip I am on, as I'd have felt cheated of something very special without her!

July 18, Saturday

A Picnic! -- down the Arroyo a mile or two. After a washing; and the study of trees with Weldon, in which we all learn to look particularly for shape and general appearance as the first distinguishing

marks of trees, and stop to note and photograph the granite flower-pot with a 50-foot pine growing out of it. After this we all gather and eat lunch with a choice of hot tea, or cold lemonade. This is fun, for here we have a chance to sit around and chat. Groups form and get into discussion on all kinds of topics. After indulging in a little nap, I come in on the tail of a conversation about education, right down my alley, -- modern methods and values, etc. I am interested in hearing what those not in the educational field have to say about these things.

At campfire we have the clever little skit Ma and Pa and three boys going to the mountains in the old jaloppy with four weak tires, that blow up so beautifully on the way!

This is our Rattlesnake Camp, even though we are farther from Rattlesnake Creek than we were at Forester Lake. Many are killed, though to Oliver's regret still more get away; and what fun for Butch and the Scott boys, -- and yes, Eva Coates is right in it too, to skin and stretch the skins. There are to be some prize hat-bands from this booty. But I did not see a one myself.

July 19, Sunday



Another day on the trail; up the Arroyo over rocks, through woods along the stream, now madly whirling, then calmly lazy, across marshy meadows, between high steep walls, which gradually spread out into a wider alpine valley. We find a good place for lunch, and though Helen and I have no billy-can of our own, we are soon joined by others who have. The photographers are all busy today getting shots along the way. I look around once to find I am ambushed by a camera fiend, as I pick my way through a marshy spot on the trail. After we reach the cabin, landmark for our route, we turn up the mountain side and in a couple of miles or so come to the first of the Little Five Lakes. We know we are near the end of the trail then, and I am not sorry. Though this has been a pleasant, easy day.

At the third of the lakes, we find our camp. It is the loveliest spot we have yet camped in, at least the most spectacular! Here our little lake is snuggled down into its bowl of great walls and peaks, but with trees making a park of its rim, and the lower end opening out into a great sweeping view across the canyon of the Arroyo to the mighty heights of the stern, jagged Kaweahs, colorful and fantastic, especially in the early morning or at sunset, when the colors glow most richly and mysteriously. Our campfires are wonderful as we sit and look out on this scene and feel the thrill of all this glory, watching the colors fade into darkness that leaves the mountains mere blobs of black against the paler sky, soon studded with pin-points of starlight, and then the yellow enchantment of the rising moon, growing big and important.

At dinner this first night we are all hungry as wolves, so that it is no wonder Put thinks he'll never get enough steaks cut for us. As we pass him in our dinner line, which seems endless, someone calls: "Hi, Put, trying to fill the Big Arroyo?"

July 20, Monday



How I love it here. Its hard to close one's eyes at night. Helen and I have a grand bedsite high up among the trees, where we get a wide view through the trees; and it's such fun to lie there and look up at the stars and out over the lake. In the morning I am glad to wake up early, because I like watching the light grow on the distant mountains and then on down the lake with its still and mysterious feeling, at this hour. Off at one end, barely within range of my sight, however, there is beginning to be activity around the commissary -- a very nice thought indeed!

Today another picnic! Up on the ridge just above camp we climb and eat our lunch and look at scenery! And there on one of the ridges on the horizon Oliver spots a little pinnacle, which is standing up alone. Betting begins as to its height. What fun it is to note the difference in guesses -- from 200' down to Oliver's 17'. (Later attempts to measure this accurately fail; it proves impossible to climb it, so none of the 5 cents bets are ever paid, and the height is still a guess.)

July 21, Tuesday

Today we hike to the Big Five Lakes, swim in one and lunch beside the falls between it and the next one, pass two more, and see all five as we climb back over the low saddle of the ridge which divides the two lake basins. It is a beautiful hike, and we all fill up still further on grand and spectacular scenery. We are all laying in a goodly supply of wonderful memories to bolster us through the long winter months to come. As we come around one of the higher lakes we find some campers; when we point to the ridge we must climb over to get back to our own camp, the woman in this other party exclaims, "My God, not up there! You don't mean you are going to climb clear up there!" Perhaps we all have a little bit of a smug feeling as we go on, to think just how bold and brave mountaineers we are, even though the climb is not difficult, and really fun as we step from rock to rock and walk over these slabs, so nicely spaced for our scramble. We come down on the other side to the upper one of our own lakes, barren and chill in its timberless setting amid the granite slopes which reach up to crest, and Black Rock Pass. We cross over to the trail, which comes from that Pass, which brings us soon to camp. But before we reach there, the rain clouds which began to gather soon after we started back from our lunch, catch up and squeeze out a little shower upon us (and today for once I left my raincape in camp, after carrying it religiously every day up to this!) But the sprinkling is short and I am not wet; but I do hurry to try out my ground cloth which I fix to use as a shelter -- it works!

It is at dinner, though, that we get our deluge -- short, but how it comes down, hail too! It quickly fills the slack in the tarpaulin which has been stretched over commissary under which we all hastened to crowd. We have to get out while it is poked up and emptied. The storm stops as quickly as it started and none are any the worse for it -- and how fresh the air smells! Campfire goes on as usual.

This campfire is one of our best. Pierce is in charge and plays for

us again. This music seems to add perfect ending to our full days, and tonight the mood is deepened greatly as we know that he and Weldon are leaving in the morning as they have been called into the armed service. The mountains are dark and mysterious and the lake deep and sombre. Weldon tells us of his trip down the Colorado with the Nevills party. I am awed to find what distinguished people we have among us. I am glad that I had read so much about the Colorado, as I can now comprehend better the dangers and adventure of Weldon's trip. And my trip to Lake Mead makes vivid the kind of country the river goes through.

July 22, Wednesday



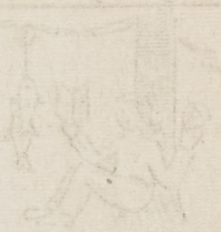
Many of the group are off hiking today -- to Kaweah Gap, and elsewhere -- or fishing -- how much we have all been enjoying the fruits of the fishermen's luck, as there are fish for everybody. But I am a lazy one again, and so get in on the high rite of rolling doughnuts in sugar as they come hot from Martin's kettle of grease! That is an honor, and great fun, and of course well rewarded with some of the "holes," until I can eat no other lunch. I get in on the last of Ethel Rose's poetry luncheon down the stream from the lake. There I enjoy especially some of the original poems. Hazel Williams has a nice one about the Billy-can, whose sentiments I most heartily support! And Ethel Rose has a sweet one about her wee little neighbor Anne, who wears three Cecil Brunner roses in her hair!

Campfire under Jean Levin and the young people's direction again has a high-light. Leland Curtis describes his experiences with the expedition to the Antarctic. I saw some of his pictures of it last year, and am I glad to hear his talk now. There is more about Margie -- what a gal! And now Joe Sharp, ever so full of ebullient good nature, reports upon the trail out over Sawtooth Pass. He makes it sound plenty bad, so that nearly a third are persuaded to take the easier route out, a two-day hike over Black Rock Pass and Timber Gap, and only the toughies are left to do the harder jaunt. But as the group divides, we all feel a little sad at the break-up, and the knowledge that our trip is nearly over. I am not ready to give it up yet!

July 23, Thursday

Early this morning the break comes, as twenty-two leave on their way over Black Rock Pass to Pinto Lake. Some of us who are left also go on up to the Pass, eat our lunch there, and soak in more of the breath-taking views we get from all the high spots we reach in our hikes. It is a wonderful world we have been living in these two weeks! Here we look down on three little lakes, of the austere barren kind above timberline, which yet are so spectacular in their severity with great granite masses around a little bit of water. They give a sense of stern reality and strength, an awe-fulness to mountain scenery. I think we are all drawn closer together and feel bonds of fellowship that cannot be broken after such scenery.

Campfire blends in beautifully tonight with this mood we have felt so strongly today. It is "Old Timer's night." Ethel Rose picks out interesting and special happenings in her "Do you Remember's," and Lila McKinne,



Elsie Bell, and Olcott Haskell all contribute to the tales and experiences, and for us new-comers, make the old personalities of other trips seem real and alive. We feel at last that we have really become one of this sacred, exclusive band -- The High Trippers!

July 24, Friday



There were no stars during the night and the threat of rain kept me a little edgy, until I wasn't sorry to have the hour really come for getting up. Our last hurried packing of bags, and swallowing of breakfast, and we are on our way! This time we hike pretty closely together, though there are plenty of smarties who get off before Oliver rounds up the last of us and we start at just 6:24 a.m., official time! We keep a comfortable, steady pace as we follow the ducks scattered so plentifully through the woods by Joe and Butch.

We cross the lower part of the Big Five Lake Basin, to the ridge beyond, then along a plateau through the woods, until we come down to Lost Creek and follow up its canyon, where it is an open alpine meadow between two walls of sheer granite slides. Over a little ridge, and we come to Columbine Lake, one of the little gems we saw from Black Rock Pass yesterday. Here on the rock ledges edging the lake, in the midst of snowbanks, and some icebergs in the lake itself, we relax and eat our lunch, and our photographers use up the last of their film! From here we have a steep little climb to the Pass. It's fun walking up the rock slabs and then stepping gingerly across the snowfields; so steep a slip will mean a nice little toboggan slide, and the final bit of rock-climbing pull up a few crevices to reach the top. Here we are right under the nose of Sawtooth, (now he certainly means something to me too!) with a snowbank for sherbet, and effective last shots by the picture-takers, and the thrilling wide view, we have learned to expect and thrill to on the passes. This one is the highest we have reached, 11,600' elevation. But there is regret for us as we finally turn away -- we are leaving this Happy Land of dreams to return to the crowded life of war and worries. And when shall we return?

So far I have not found the going as bad as I feared it might be, but as we go down, it really is tough -- my knees! oh, my knees! rocks and gravel, and still more rocks, and still we keep on going down, and very steeply too, as we must lose 3800' elevation in five miles! The flower fields are beautiful gardens of massed glowing colors, but I have lost some of my ability to enjoy them by this time! And then, down at last, we still have the last mile to walk up to camp! All the way down I felt as if condemned to a treadmill, out of which I should never escape, and just when I thought I had escaped, then, I must still go that extra mile! "The last straw," -- you know -- I couldn't even bear the thought of standing in line at dinner for my seconds of ice cream -- enough said!

But bed, and a few hours sleep, and I could almost -- almost do those fifteen miles right over again. And how I do wish wholeheartedly that this were just the start instead of the end of these two glorious weeks. Now they belong to my memories!



# THE HYBRIDIZED HIGH TRIP FINDS ITS NITCH

By Bob J. Schonborn



The 1942 Three Camp Trip of the Sierra Club was the first of its kind and was a big success.

Referred to as a hybrid, it combined in a limited degree the traditional Sierra Club High Trip feature of moving several times from campsite to campsite along a given route with the newly established Base Camp's outstanding characteristic of one base campsite for the entire period. In addition to the "in and out" terminal camp at Mineral King, the Three Camp Trip provided, as the name implies, three camps enroute, namely: Forester Lake, Big Arroyo, and Little Five Lakes.

The time allotted to each of these camps was long enough to allow the use of each as a sort of a brief base campsite from which one-day trips were taken to many delightful nearby regions of great scenic splendor.

Nearly everyone took part in one or more side trips from the three base camps.

A few of the many worthwhile trips which were enjoyed by members are herewith briefly reviewed. There were others of equal or greater merit which are not mentioned because of lack of space.

First there was Weldon Heald's trip from Forester Lake to a 12,000 ft. peak overlooking Little Claire Lake and which had been rather inadvertently climbed as a first ascent the previous day by other members of the party. The view from here afforded a comprehensive outlook over country that we had passed over and which we were as yet to travel through. Leaving this peak we continued along the ridge for about two miles and made a first ascent of an unnamed peak, elevation 12,036 feet. From here we looked across and down onto Sky Parlor Meadow and Moraine Lake situated on Chagoopa Plateau, Mount Kaweah and the other multicolored Kaweah Peaks. Along the eastern skyline the main crest of the Sierra stood forth in bold relief against a turquoise sky clearly showing Mt. Whitney and the ragged crest south to Army Pass and Cirque Peak.

On the return trip Forester Lake showed dark blue against its varied surroundings of green forest and massive gray rock.

From the Big Arroyo camp there was one outstanding trip; down the Big Arroyo past the tree which when approached from the upstream side appeared to be growing from the flat top surface of a huge block of granite, past rushing cascades to the point where the trail started its arduous climb to Chagoopa Plateau. Reaching the plateau the trail presently came in sight of incomparable Sky Parlor Meadow with its lush green cienega bordered on the trail side with a great field of lupine in full bloom sweetly scenting



the cool invigorating air.

Some of the party in walking around the edge of the meadow discovered "E Guthrie's Cow Camp, 1922," with its old home-made carpenter's work bench. Other signs of past activity in evidence included the sign inscribed "Wet Camp for Dry Folks, E. Guthrie, II."

Then on to Moraine Lake, elevation 9,440, which really is a delightful lake in which to swim, with a temperature warm enough to present one telling oneself or others any white or other colored lies about the enjoyment of the water.

This trip, although involving a steep climb out of the Big Arroyo was of sufficient interest to at least one member of the party to warrant a second climb on the following day. The return trip afforded a jaunt out to Observation Point from which a grand view of the Kern and the lower Big Arroyo was obtained.

From our last "so called base camp" at Little Five Lakes there were a mumber of extremely interesting side trips taken.

To my mind, the outstanding trip was to Kaweah Gap and frozen Precipice Lake. The route, previously pioneered by Angus and Patsy Taylor, left the trail high above the Big Arroyo at a certain "zig" and then carefully contoured over wild but not too difficult terrain and came out upon the John Muir Trail in the wide valley of the Big Arroyo without losing any elevation. Then continuing up the Big Arroyo for a mile and climbing up to Kaweah Gap, we were awarded with a view of several of the Nine Lakes situated on the headwaters of the Big Arroyo. Looking towards the west in the distance was familiar Moro Rock and Giant Forest, in the middle distance the spectacular cliffs of Valhalla, and in the near foreground some of the Hamilton Lakes including frozen Precipice Lake.

These descriptions relate only to the scenic aspect of the various side trips; however, of much greater importance and enjoyment was the ever present friendly companionship of the Sierra Club members on the trail and at the inevitable tea parties. It is characteristic of the true Sierran for he is above all, a lover of the unspoiled wilderness and never a spoiler of the few remaining primitive regions. Unselfishly he recognizes his responsibility of guardianship, both of the wilderness and for those who cherish it.



## CAMPFIRE RECOLLECTIONS

By F. Pierce Spinks, Sire.



The recounting of the campfire entertainments of the High Trip this year is a pleasure indeed, bringing back to all who were present, the scenes that we loved up high in the cool mountain air. The warm campfires with all our good friends around, the roar of streams and rivers which provided an accompaniment to our music and stories, the smell of pine pitch as it burned in the freshly cut wood, the sound of rare birds that only Alice Rundle of Stanford (our Trip Ornithologist) could tell the names of, the sun-burnt faces lit up now and then with the glow of fresh wood on the fire, the repose of the all-day hikers as they stretched out on the ground. All these things are vivid in our memories and pass before our minds' eyes as does a film on the screen.

So let us in memory seat ourselves around one of our campfires in a little rocky hollow close to Forester Lake. A background of pine trees is broken to allow a clear view of the still lake and distant snow-covered mountain peaks. These and other campfire settings called forth the best from each one, and it was truly surprising how much talent came out of that little group of 90-odd people.

Our campfire Sire (or MC if you prefer), not knowing any of the members of the party nor their talents, but believing that everyone has potential talent, some more, some less developed, issued a call for volunteers to take part in the campfire programs. The distinction of being the first to respond goes to David Gadlow who broke the ice with his humorous stories. Dorothy Markwad of numerous talents, brightened the evening with accordion music, as did the Sire with Kreislerian melodies from his violin.

At about this time "Margie," that legendary (and evanescent) wench, character or goblin of the High Trips, began to come to life. Sired by Dr. H. E. Crowe many summers ago, an attempt by its father to strangle and bury it once and for all, met with little favorable response, and by popular acclaim, Margie held the center of the stage at one of the campfire programs, contributing no end of amusement to the delighted High Trippers. Margie is like a camp cartoon: her pranks and antics will give you a desire for more.

Following this was a purely impromptu event: Jack Allen, in the excitement over his first big fish, dropped his hat into the swift stream. It floated away in the current before he had a chance to recover either the hat or the $20.00 bill that he had pinned inside it. No one knew of his loss until he came up to the Sire that evening in the middle of the program and begged to be put on next. So, much to everyone's amusement as likewise his own, he told the story of his misfortune and acted the part so well that he won his way into all of our hearts.

Let us see, who were some of the others -- shall we call them "story-tellers?" There was Dr. George Lachman who made us all think we were home in t



Club with his good wit, there was Herb Breed, with his inimitable scratching story, as well acted as told -- and as I recount this program my hands go out involuntarily to my sides and arms and legs to catch those fleas conjured up by Herb's masterful story-telling. Then there was Barrett Coates who surprised us with his Irish wit.

On another evening we had the privilege of listening to the adventures of Weldon Heald, who had personally run some of the worlds most vicious rapids down the Colorado River from Lees Ferry to Lake Mead only last year. To our amazement he described the waves in some places as being 26 feet high. To the question why did you do it and what did the trip accomplish, he replied in good grace: Why do you rock-climbers climb barren peaks only to come down again. And speaking again of real adventure we had with us the official artist of Admiral Byrd's South Pole Expedition, Leland Curtis. Though it was a cold night, Leland made us feel warm when he told us that the warmest summer day of the Antarctic trip was 34° F and that even on the coldest night he slept warmly in his sleeping bag, which contained 17 pounds of dowm!

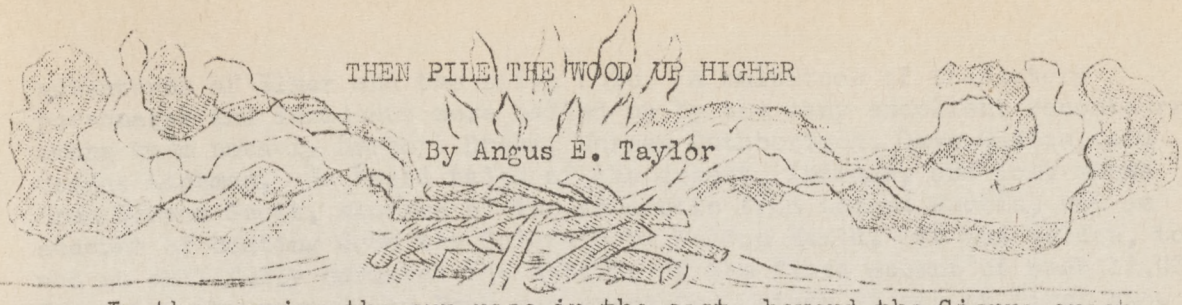
On one fine evening in the Big Arroyo, Morgan Cuthbertson gave us an illuminating talk on the Kern River Valley, into which the Big Arroyo drains. Benson Scott delighted us on several occasions with his fund of stories and legends of the Indians in Arizona. Other contributions were from Jean Parker, Paul Williams, Dr. Al Reinke, and Hilda Weichhart. And on several occasions, Joe Sharp interpreted latest world news in a manner that rivaled the best of news commentators. He even kept us up-to-date on comic strip characters. On one evening, prizes were awarded for a fancy dress party and bandanna exhibit -- most of them going to Elsie Bell Earnshaw. In this "Patsy" Taylor starred in the role of Wagner's Brunhilde. This show was all the more remarkable because all the characters had to be simulated from clothing and effects brought on the trip in our 35-pound dunnage bags. Ruth Prager came as Salome, Patsy Taylor as Wagner's Brunhilde, Hazel Williams in a patriotic theme-costume, etc., etc.

We must not forget our mixed chorus which drew its first rather feeble breath as a quartet on the third night out, and later grew into a healthy buxom mixed chorus composed of Mary Alvarez and Patsy Taylor, Sopranos; Connie Menzie and Carolyn Coleman, Altos; Angus Taylor and your Sire, Tenors; and Paul Williams and John Cassel, Bass. At first the music had to be written out and harmonized but days later a printed song book was found. This mixed chorus formed the basis for general singing, and as this is a most agreeable combination and the basis for all good singing, it is recommended for future High Trips.

Much more could and should be written about these campfire programs but space forbids. Let me thank each one, though, for the cooperation which made it possible to enjoy such worthwhile evenings around the campfire.

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(Note by O.K.: Much credit is due to Pierce Spinks for his bringing out latent talent and welding into perfect unity a wonderful series of campfire programs. Pierce also added to the programs with his excellent violin solos, his talks, stories, and songs. Pierce thus proved a welcome relief to yours truly and earned the appreciation of the whole camp.)



# THEN PILE THE WOOD UP HIGHER

By Angus E. Taylor

In the morning the sun rose in the east, beyond the Sierra crest, and shone down on the Sierrans, who had breakfasted in the cool, early hours. While the sun rode high in the heavens, the mountain-loving folk were scattered abroad, by the margins of sky-friendly lakes, through the glacier basins, in tufted meadows, by singing and limpid waters, high in the cirques, or upward on the light-drenched ridges and cols of the high divides; anywhere and everywhere they went, in search of nothing, but full of a desire to breathe the free air, to feel the constancy of enduring strength and beauty in the mountain forms, and to gaze, clear-eyed, at far, untroubled horizons.

Through the afternoon they drifted, singly and in groups, back to the common fold. Each had his day's harvest, a day of purest crystal Sierra sunlight, with its peculiar treasures for him.... The day waned, well and fully spent.

As evening came on, the Sierrans busied themselves with food, and there was an air of occupied contentment among the groups that congregated roundabout the camp. When the dinner hour was over, the campfires glowed their announcement that the hour of evening fellowship had arrived. Then, as the sunlight faded on the lofty summits, the Sierrans sat together in a circle, the two fires acting as a symbol by which the assemblage of individuals merged their spirits.

The broad pattern of Sierra days is the same from year to year, but it is a pattern endlessly intricate in detail, with variations according to the year, the season, and the particular locality within the mountains. Each campsite is individual, and around the memory of each campfire there hover distinctive nuances of color, form, and feeling. Who can forget how, after campfire at Forester Lake, we paused on our way to bed, to see the silent company of stars shining up from the depths of the unruffled water? And, at the first campfire at Little Five Lakes, who did not turn, in utter abandon of the moment, to watch the Kaweahs suffused in afterglow?

Our memories of comradeship around the fire are peopled with a generous assortment of individuals, some known of old, some but newly met along the trail or in the dinner line, each of whom at one time or another held the center of the stage, contributing a share of the evening's fun. Great was our joy when Dr. Crowe brought us news of Margie, thus quieting the rumor that she had passed permanently into legend. Margie was at least partially responsible for the ludicrous sight which presented itself the next day, when dozens of Sierrans were observed sniffing the pines, hoping to distinguish a Jeffrey from a Western Yellow by the odor of the bark! From Barrett Coates we heard accounts of the

adventures of Elmer and the naive Lulu. A multitude of transitory personages and incidents were called up by the many excellent raconteurs -- among them notably Herbert Breed, Morgan Cuthbertson, Dave Gadlow, and George Lachman. We heard tales of the desert, Indians, and lost mines from Benson Scott, stories of the Antarctic from Leland Curtis, and an account of boating down the Colorado by Weldon Heald. It was Weldon, too, who so skillfully narrated the details of the first ascent of peak 12,036, for which the name Dairy Peak was suggested, since it was at first suspected that the pioneer ascent may have been made by a cow.

Joe Sharp reminded us, intermittently, of the existence of an outside world, by announcing the significant war news with merciful brevity. Those of us who went out by way of Lost Canyon and Columbine Lake have added reason to remember Joe, for it was he who, with Butch Hatfield's help (or was it vice versa?), built the truly magnificent trail of ducks to guide us.

Until Pierce Spinks left us, at Little Five Lakes, we were treated regularly to fine violin music. Pierce also fostered, enthusiastically, a small vocal group, which performed at campfire in the Big Arroyo. On the rollicking side, there were Dusty Rhodes with his harmonica, and the inimitable duo -- Put Livermore and Bart Evans. Of course, we all sang, and learned Sierra Club songs, under the leadership of Patsy Taylor.

Mountain memories, mellowed by years, spring from deep wells of unconsciously garnered impressions. On Old-Timers' Night, we shared the memories of Elsie Bell Earnshaw, Olcott Haskell, Ethel Rose Taylor, Oliver Kehrlein, and others. Perhaps that evening, rich and satisfying, will be preserved in memory when the rest of us are old-timers. Certainly we shall not forget the warm, cloudy night, our last in that high camp, the embers glowing as we lingered, talking, and the pregnant query of Ethel Rose: do you remember?

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P. S. by O.K. We add that it was to Angus Taylor, author of this excellent description and to Pierce Spinks, above mentioned violinist, that the Three Camps group owed the pleasure of such well organized campfire programs. All were replete with good music, worthwhile talks, and frequent items in a lighter vein.

# A TRAINING GROUND FOR FUTURE SIERRANS

By Bergljot Blom

It seemed possible at last that the children might come along on a Sierra Club mountain trip. Having spent a two-week period in the lower mountains with their parents every summer since infancy, they felt quite experienced and ready for this new and glamorous challenge to their abilities. A Sierra Club trip had always been held before them as a "some day" climax to their earlier efforts. The Five Lake Basin base camp trip was an excellent experience for them at the ages of 12 and 13 and was quite an adequate vacation for the "aging" parents.

The desirability of tempering strenuous exercise for children and parents alike is answered by our base camp trips. Several parents who brought their children this summer perhaps reasoned likewise. There were Jim and Charles Lipman, 8 and 9 years old, who rode horses on the trail and were always happy and content. The four Levin daughters were charming and energetic and Peter Hallock energetic and entertaining. Peter Kehrlein as commissary helper drew everyone's admiration for concentrated efforts by stoves and "chickie" buckets. Fred Johnson, at the age of 15 on his own away from parents, was as good a mountaineer as many of the well seasoned oldsters. Our son left his parents far behind on the trail.

The advantages of the trip to the children were many. Through Oliver's able guidance they experienced mountaineering under best conditions and learned good citizenship in our mountain community. The campfire talks by John Thomas Howell on the flora and geologic history of the Sierras, separated from the odious words "school" and "education" were always welcome. His story of Phacelia intrigued us and lured Andrea and me away from fishing. We spent quite some time unsuccessfully hunting her. But the search led to many discoveries of beauty and interest.

Campfire fun of clever skits and much banter, laughing, singing, roasting, freezing, -- who would miss it! "But, my dear, it is far past your bedtime!" "Just five minutes more, mother!" There were no ill effects from later than usual hours. We rested sometimes by day and swam and sun-bathed, steeped in good health and good humour. Former summers' family fun continued, with fishing and frying the fish by lake and stream, hiking and dipping in ice cold water, while communal life and its sociability lent a new and exciting interest. Alway playmates, young and old, for splitting wood or washing vegetables, for climbing a peak or loafing. No mosquitoes, no snakes, no worries -- and lots of good food! The high light of social events was Elsie Bell's children's party with ice cream and everything! In campfire entertainment the children's burlesque on commissary held its own.

So, when your children are well over the "piggy-back" stage, take them to base camp for a family vacation. It is a satisfying experience to teach one's young the ways of the Club. And they are surprisingly adaptive. All is fun, even overdue mules and sleeping bags. For then we had another campfire, later than usual!

It is to be hoped that base camp trips will be continued and will attract more families. Particularly in these uncertain times it is so very important to keep our children's lives normal and happy as long as possible. And for many of us mountain vacations have become essential to physical and mental well-being.

# PLANT LIFE SEEN ON THE THREE CAMP TRIP

By John D. Cassel

The flowers of the Southern High Sierra were just coming into full bloom when we arrived at Mineral King. Two weeks later they had reached an impressive climax.

The dominant tree at Mineral King was the Red Fir. Willows and poplars are abundant on the lower hillsides and wet places, with abundant spring flowers: Mertensias, Swamp Onions, and Monardellas in blues and purples; Monkey-flowers, Marigolds, Senecios, and other composites in yellows; and Red Sierra Primrose about the rocks on the trail to Franklin Pass.

Lodgepole Pine predominated at Forester Lake, with Foxtail Pines Common. The Lodgepole used for firewood showed over 250 growth rings about 25 inches from the ground. The forest here as at other places visited was a mature "climax" forest of trees undisturbed by forest fires and long in a state of equilibrium.

Common small perennials at Forester Lake were heathers (Bryanthus Breweri, Kalmia polifolia,) Labrador Tea (Ledum,) Climquapin, Gooseberries, Monkey-flowers (M. guttatus and the delicate M. primuloides of the wet meadows,) and Shooting Stars (Dodecatheon Jeffreyi and D. alpinum.) The rocky cliffs of Rattlesnake Creek were alive with flowers (Senecios, Sedums, Cotyledons, Saxifrage, Thistles, Zydaenus and many others.)

Soda Creek trail proved thrilling botanically, with a giant Red fir approximately eight feet in diameter (perhaps the largest on record), and plenty of Jeffrey Pine, Lodgepole Pine, Red Fir, White Pines and Junipers. Here I noticed Quaking Aspen for the first time, and numerous beautiful specimens of Snow Plant (Sarcodes sanguinea).

Beautifully green Sky Parlour Meadow was made more attractive by fragrant strips of blue and white lupine, wild strawberries, odd seeds of Cynoglossum occidentale. Single-leafed pine (Pinus monophylla) and mountain mahogany were found on the point overlooking the Kern River.

Little Five Lakes had relatively few flowers as the snow had just melted. Dwarf manzanita carpeted the meadows here as elsewhere at this elevation. In high rocky places Pentstemon newberryi and its purple cousin P. menziesii var Davidsonii, Monkey-flowers, Columbine, Arenarias, Sierra Primrose, Onions, and even a few patches of Forgetmenot impressed me most.

Red snow was quite common near Little Five Lakes. This is due to green algae, the most common of which is Sphaerella nivalis. This and other snow dwelling algae are provided with red haematochrome discs which serve to absorb the maximum number of light rays for photosynthesis. These discs give the red color to the algae and mash the green chlorophyll which is also present.

The trip from Little Five Lakes to Mineral King by way of Black Rock Pass, Cliff Creek, and Timber Gap provided a glorious collection of different flowers. The most striking plant was the purple bush lupine which formed wide strips of color across the canyon of upper Cliff Creek. From here on were Monkey-flowers, Onions, Brodiaes, Senecios, Rem-orchis, Phacelias, Pentstemons, Lotus, Clovers, Potentillas, Blue Flax, Astragalus, Geraniums (the beautiful G. richardsonii), Asters and Erigerous, Paintbrushes, Bee Plants, Monardellas, Agastache, Gilias and Hugelia, Epilobiums, Wallflowers, Violets, Sidalcea, Water Cress, Streptanthus and other Crucifers, Buttercups, Calochortus, Tiger Lilies, Zanschneria, and so on.

LIST OF BIRDS SEEN ON HIGH SIERRA TRIP -- JULY 11 to 25, 1942

By Evangeline V. Coates

## MINERAL KING

1. Pileolated Warbler
2. White-crowned Sparrow
3. Willow Goldfinch
4. Ruby-crowned Kinglet
5. Downy Woodpecker
6. California Woodpecker
7. Robin
8. Olive-sided Flycatcher
9. Hermit Thrush
10. Lutescent Warbler
11. Audubon Warbler
12. California Jay
13. Wood Pewee
14. Western Tanager
15. Clark's Crow
16. Anna Hummingbird
17. Cassin Purple Finch
18. Chickadee
19. Junco
20. Rufous-crowned Sparrow

## MINERAL KING OVER FRANKLIN PASS

1. Hermit Thrush
2. Chickadee
3. White-crowned Sparrow
4. Clark's Crow
5. Sierra Rosy Finch
6. Rock Wren
7. Wood Pewee
8. Olive-sided Flycatcher
9. Ruby-crowned Kinglet

## FORESTER LAKE

1. Hermit Thrush
2. Junco
3. Wood Pewee
4. Clark's Crow
5. Audubon Warbler
6. Cassin Purple Finch
7. Chipping Sparrow
8. Golden Eagle
9. Townsend Solitaire
10. Chickadee

## LITTLE CLAIR LAKE TO BIG ARROYO

1. Townsend Solitaire
2. Audubon Warbler
3. Warbling Vireo
4. Crested Jay
5. Russet-backed Thrush
6. Junco
7. Sierra Rosy Finch
8. Lutescent Warbler

## BIG ARROYO

1. Junco
2. Chickadee
3. Townsend Solitaire
4. Hermit Thrush
5. Western Tanager
6. Audubon Warbler
7. Sierra Grouse

## UP BIG ARROYO TO LITTLE FIVE LAKES

1. Audubon Warbler
2. Robin
3. Junco
4. Clark's Crow
5. California Woodpecker
6. Chipping Sparrow
7. Hermit Thrush
8. White-crowned Sparrow
9. Rosy Finch

## LITTLE FIVE LAKES

1. Mountain Bluebird
2. Clark's Crow
3. Junco
4. White-crowned Sparrow
5. Chickadee
6. Allen Hummingbird
7. Violetgreen Swallow
8. Wood Pewee

## LITTLE FIVE LAKES TO KAWEAH GAP

1. Mountain Bluebird
2. Sierra Rosy Finch
3. Junco
4. White-crowned Sparrow
5. Sierra Creeper
6. Chickadee
7. Wood Pewee
8. Clark's Crow

## LITTLE FIVE LAKES TO BIG FIVE LAKES

1. Hermit Thrush
2. Junco
3. Clark's Crow
4. Sierra Creeper
5. Ruby-crowned Kinglet
6. Robin
7. Mountain Bluebirds (2)
8. Sierra Rosy Finch
9. Chickadee

## LITTLE FIVE LAKES OVER BLACK ROCK PASS TO PINTO LAKE

1. Clark's Crow
2. Audubon Warbler
3. Mountain Bluebird
4. Pileolated Warbler
5. Red-breasted Sapsucker
6. Willow Goldfinch
7. Crested Blue Jay
8. Rufous Hummingbird
9. White-crowned Sparrow
10. Wood Pewee
11. Chickadee
12. Olive-sided Flycatcher

## PINTO LAKE TO MINERAL KING

1. Junco
2. Olive-sided Flycatcher
3. Wood Pewee
4. Pileolated Warbler
5. Lutescent Warbler
6. Rufous Hummingbird
7. Rufous-crowned Sparrow
8. White-crowned Sparrow
9. Willow Goldfinch
10. Clark's Crow
11. Western Tanager
12. Sierra Grouse

INTERIM CAMP -- A WONDROUS INTERLUDE

By Elsie Bell Earnshaw



The very words "Interim Camp" bring happy memories to everyone of the fortunate "fourteen" who were left by the "Three Campers" to wait at beautiful Little Five Lakes for the "Base Campers" for five blissful quiet days.

Of course, we missed our good friends of the past ten days and regreted their leaving -- so much so that I went to the top of Black Rock Pass to lunch and say "Farewell" to them. Was rewarded with a glorious view of Columbine, Cyclamen, and Spring Lakes, each in its own little shelf-like cirque -- so beautiful and austere with naked granite cliffs, broken only by snow-banks.

Then came the big job of cleaning commissary. Everyone lent a willing hand. Dr. and Mrs. Crowe washed and polished all the pots and pans for Chuck, who had a cold and had been sent to bed by Dr. Crowe. Great plans, too, were made for meals. Breakfast, being a delightful cozy affair with everyone arriving whenever they wished -- a plan we decided was perfect and wished that it might be continued when Dean arrived. Such delicious Canadian bacon, toast, cereal, fruit, coffee, chocolate, and tea. So, you see everyone was pleased. Besides, the Champion Fisherman, Jim Utley, provided trout, excepting on the morning when we found the cover had been removed from the trout and Clark's Crows had stolen all except five fish. They carried away 14 and 15 inch fish! Jim also made a delicious omelet seasoned with wild onions.

Meals were very simply arranged by electing teams, of two ladies to each dinner. Competition was great! Mrs. Crowe did the beef roast. Not knowing how long it took in that altitude she started in the morning. By noon it smelled so appetizingly that we had hot roast beef sandwiches for lunch as well as for dinner. Carolyn Palmer made so much peach cobbler that the next night's crew was again able to use it for desert. It really was a super desert. Ethel Rose Taylor sacrificed her private stock of real olive oil for salad dressing, and never was a salad more enjoyed and appreciated. For Sunday dinner Lila McKinne and I cooked chicken fricassee and rice a la San Tachet. We certainly did live well in our mountain fastness with a whole tent of provisions to draw upon.

The days were long and lazy. Leland Curtis and the Crowe's sketched. The rest of us roamed over the countryside with swims in the lakes and sun baths the order of the day at the waterfall.

Those five magic nights were marvelous. One evening we had an especially brilliant alpine glow on the Black Kaweah. Campfires were held at Hazel William's camp. There she had a large rock for a back to her fire and comfortable rocks to sit upon, plus a glorious view of the Kaweah's across the lake. Various ones gave interesting talks. Leland Curtis told us of many interesting sidelights on his trip to the Antartic, while Ann Crowe gave a most interesting



review of "A Mission to Moscow." We played games invented by Carolyn and Hilda, accompanied by much laughter. Later we toasted marshmellows and had Billycan tea; then trailed off through the silent, moonlit forest to our sleeping bags to dream of other happy days to come.

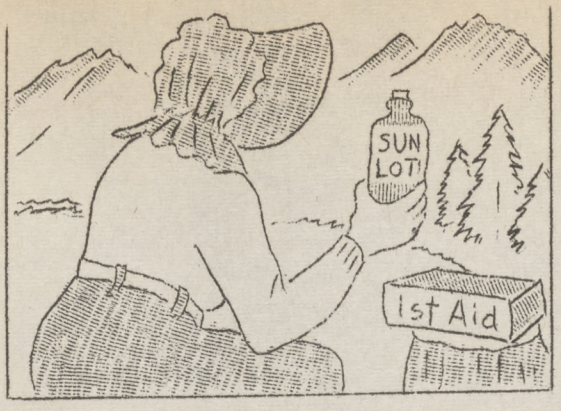
Would that I had the gift of words to convey to you the peace and strength the mountains gave to us. In a recent New Yorker there was a list of the "Ten Finest Things in Life." Four of them were: 1. Dawn; 2. The mountains, the desert, and the sea; 3. The understanding between friends; 4. The joy of existance. We certainly had them all at Little Five Lakes.

Then came Monday and our last day alone. After dinner that night, four of us scrambled up to Black Rock Pass, to see, before us, the most gorgeous sun setting far out toward the Pacific, while behind us the lime-colored moon was coming up behind Mt. Whitney and below us at Pinto Lake the twin campfires of our friends. We flashed lights, but no! They were too sleepy to heed us. So home we went to our own wee campfire, all except Black Bart, who could not resist going all the way down to Pinto Lake to see everyone and come in with them the next day.

By 10:30 the next morning the pale faced horde began to arrive and our beautiful Peace departed. However, the mountains rang with merry laughter of folks enjoying making "home" for the next ten days and we were surrounded by friends. Just another kind of Peace!

---

(NOTE: Elsie Bell obligingly accepted the leadership for this camp and from all reports did a good job worthy of a Clair Tappaan. Much to our surprise and satisfaction, camp was immaculately spick and span when we arrived and everybody was well fed and happy. Our choice of leader had proved a happy one. O.K.)




Aunty Em, an old farm woman from Jerseyville, took her first Sierra Club High Trip a couple of years ago. She was on the Base Camp this year, but, as she is a woman of few words, you perhaps didn't notice her.

Just to show how much a body gets out of a trip like Base Camp, we are printing a letter she sent to Oliver when she got home.

Emily C. House

THE LETTER

Mildew Meadows Farm

Dear Ollie:

While Hank's out a milkin' I'll jest set down a spell and write you how much I enjoyed the Base Camp this year. I've been awful busy since I got home puttin' gussets in all my clothes. I guess it's a good thing I come home when I did. I put them jeans I wore down Sawtooth in the missionary barrel. I'm jest beginnin', as Hank sez, to get house-broke again. Hank met me at the station when I come home and, to celebrate, we et at the cafeteria. They was a long line at the counter and by the time I got to the table with my tray I had et everything and had to go back for seconds.

I learned right smart about victuals from that Dean Sheff fella'. Guess he must eat regular at swell places like the cafeteria when he's home because when we helped him get breakfast he made us cut up them grapefruit till they woulda went through a sieve. One mornin' he said he wanted all them eggs shirred. Knowin' how gosh awful particular he was I was glad I'd brung along one spool of silk thread. Dean wouldn't of stood for no cotton.

I've been tellin' Hank how scientific Dr. Crowe is. Hank got a big kick outa how he told us to eat salt and how that Ph.D. woman et so much that when she sneezed some of it lit on the tail of a Clark Crow and all she had to do was reach out and pick him up.

It's wonderful meetin' celebrities like you do on one of them trips. But there was one fella' John Thomas Howell kept talkin' about that I would give my store teeth to of met. That was Major Uplift. Maybe the government was keepin' his whereabouts a secret.

The fishermen sure was havin' a swell time. I was walkin' along one of them lakes when I come across Sparky Wilson. He was a castin' and a sayin' over and over, "Every day in every way I catch 'em bigger and better. After about five minutes he hauled in his line and sure enough they was six fish on it. They was kinda water-logged though. Some one had throwed away a


SUN
LOT

half-et can of kippersnacks.

I want to thank you too, Ollie, for not havin' it rain none. One night I got an awful scare though. I waked up sudden-like and the sky was plumb black. There wasn't a star in sight. I set up quick to grab my poncho and hit one of them mules square in the belly. I guess I scared him because he jumped off my bag and then I seen the moon was shinin' bright as day.

The high point of the trip for me though was a climbin' over Sawtooth Pass. I thought of them Donners and wondered if I was going to leave my bones to bleach along the trail. But then I got ashamed of myself re-memberin' all them under-privileged folks back in the city a settin' on their porches drinkin' ice tea while I was a slidn' over scree. I guess was I able to measure it, I'd used enough energy to have lifted the Empire State Building three feet off of it's foundation but of course what I was doin' was much more worthwhile.

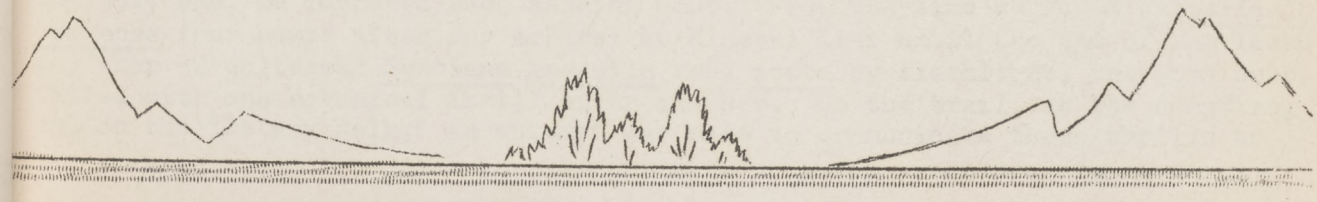
Well Ollie, Hank's jest come in from the barn with the milk so I guess it's time for separatin'. Get it Ollie? I always was one to have my little joke.

Love and blisters,

Aunt Em

---

(We pre-empt this space to thank Aunt Em and all of the members who wrote such kind letters of appreciation, after the trip. They came just at a time when we were heaving a big sigh of relief and satisfaction at having gotten through with all of the clean-up details. They spurred us on to hopes of a better camp for next year -- if there should be a next year and other outings. Many, many thanks to you all. O.K.)



# LEAVES FROM NATURE'S INFINITE BOOK

## A Résumé of Scientific Activities
## Sierra Club Base Camp, 1942

By John Thomas Howell

The basic factors affecting all life in a region are the physical geography or geology and the climate of that region. Because of its mildness and dryness, the world-famous summer climate of the Sierra Nevada was more or less taken for granted as we were exposed to it, with days filled with sunshine and nights with starshine. But not so the geology -- the rocks told stories that went back to a ancient pre-Sierran sea and the peaks and canyons told of the tremendous struggle between the forces that build up mountains and the forces that tear them down. These were matters we did not take for granted. Because of the diversity of the region and the fundamental character of geology to the proper appreciation of everything we saw, no opportunity was lost to expatiate on the geologic scene even at the risk of becoming tedious. Here, some of the geologic matters we discussed at campfires, on the trail, and on the "Geology Walk":

What more sublime geologic page does Nature open in the Sierra than the canyon of the Kaweah River above Mineral King, carved in a metamorphic pendant that hangs on the slope of a granitic range? To have passed through Mineral King without reading a little from that page would have been a real loss, because the rocks in that canyon told of the very beginnings of our mountains.

At the summit of Black Rock Pass, not even the scenic grandeur of the view could suppress a few words on the geologic history of the upper Kern Basin, a story which is most impressively demonstrated by the glaciated and unglaciated features of the landscape. The geologic past of this region has been most stirringly reconstructed by Professor Lawson (Geomorphogeny of the Upper Kern Basin. Bull. Dept. Geol. Univ. Calif. 3: 291--376).

Again at Moraine Lake another geologic page was presented -- the anomaly of a morainal lake on the unglaciated Chagoopa Plateau; why? -- because the ice in Big Arroyo during the period of glaciation lapped over the edge of the plateau, gouging out the shallow basin and throwing up a dam-like moraine.

And why is Kaweah Gap? Apparently it is a low pass in a mighty range, carved by a tremendous glacier which poured westward from Nine Lakes Basin and pushed over the gap instead of turning southward down the Big Arroyo. To that great ice stream must go our thanks for mystical Precipice Lake, the Hamilton Lakes, and Valhalla.

The Kaweah Range as we saw it from camp, presented a spectacular picture that all could interpret, so deeply carved by ice and snow at the north end and almost unglaciated at the south end.

Need we say that the botanical chapter in Nature's book was most thoroughly and assiduously perused? The opportunity to study the plant life in such distinctive areas as Mineral King and Chagoopa Plateau was exceptional, and like the busy bee, we improved each shining hour. From the time we found Phacelia orogenes four hours after our arrival at Mineral King until the end of the last day when we collected Gentiana Amarella var. acuta by flashlight, the days were filled with one botanical thrill after another. On the trail, at the campfire, and on the "Botany Walk," an attempt was made to communicate these thrills to

Base Campers -- because so many things are so thrilling and it is such a loss to lose a single one!

The "Highest Flower Show in the World" was maintained at Little Five Lakes for the duration of the Base Camp. Here the more common and striking of herbs, shrubs, and trees in the vicinity were displayed with common and scientific names. To Laura Mercado, Dorothy Huggins, Suzanne Allen, and others I am grateful for help in assembling and maintaining this interesting and, I hope, instructive exhibit. Before the close of the Base Camp, a series of flower-arrangements were displayed by a number of Base Campers and awards for merit were made in proper flower-show manner.

The 1942 collection of botanical specimens is larger and more diverse than were those of previous Base Camps. Among the outstanding plants that were found is a fern new to California, two or three new lupines, and several plants whose status is still uncertain. Among other noteworthy plants that might be mentioned are: Triglochin palustris at Mineral King (second collection for California), Salix petrophila var. caespitosa at Little Five Lakes (farther south than ever reported), and Carex capitata at Sky Park Meadow (a little sedge with circumpolar distribution persisting in an unglaciated area from preglacial times). (Didn't Oliver tell you about this little carex, Sky Parlor's fleur d'jour, the night I "played hooky" from campfire?) The entire collection which is reported in detail hereafter, will be a valuable and useful accession to the Herbarium of the California Academy of Sciences, where the specimens will be available to all for study.

One of the outstanding botanical accomplishments of the Base Camp was the actual count of rings in a big Lodgepole Pine at Little Five Lakes. Peter Friedricksen felled the dead giant which measured 40 inches across the stump at 2½ feet above the ground. Dr. Hallock counted between 500 and 510 annual rings which, it would seem, indicate an age more than twice as great as that of the oldest Lodgepole heretofore reported. Regarding the longevity of the Lodgepole, Sudworth writes: "Attains an age of from 100 to 175 years; but doubtless it is capable of reaching from 200 to possibly 300 years, if exempt from fire . . ." (Forest Trees of the Pacific Slope, p. 51). Since the tree was dead and had lost its identifying bark, it was essential to preserve a piece of the wood so that none would be able to say that what we had measured was a Foxtail or a Juniper! In my hectic activity preparatory to leaving Little Five Lakes, I neglected to collect a piece of the wood; but Ethel Rose Taylor, who returned to Little Five Lakes during the High Horse Trip, obtained the much-needed voucher. A part of this has been submitted to Dr. Irma S. Webber, wood-specialist of Riverside, and the verdict is Lodgepole Pine! Bravo for Peter Friedricksen, Dr. Hallock, and Ethel Rose Taylor for establishing an impressive new "ceiling" for the age of a swarthy old Lodgepole! It is a Base Camp accomplishment in Botany of the first order.

In the evening, after the geology and botany of daylight hours, we turned our glances skyward to the stars. On several occasions we had star-gazing "expeditions" to the cool (?) open meadow near commissary, where we were able to locate the brightest stars and chief constellations of the summer skies, and where we enjoyed the exceptionally brilliant display of meteors which frequently flashed into view. Those who arose early enough in the morning (as

some did who climbed Kaweah or who wished to get some choice morning light for a picture), had a foretaste of the glory that will be our winter skies; for not only were visible the brilliant winter stars, but also a glittering trio of planets, with Venus, the morning star, incredibly bright. And what did Venus wear? She was clothed in raiment of light furnished by Apollo, raiment so dazzling in the clear mountain air as to defy rosy-fingered Aurora, the harbinger of Apollo himself!

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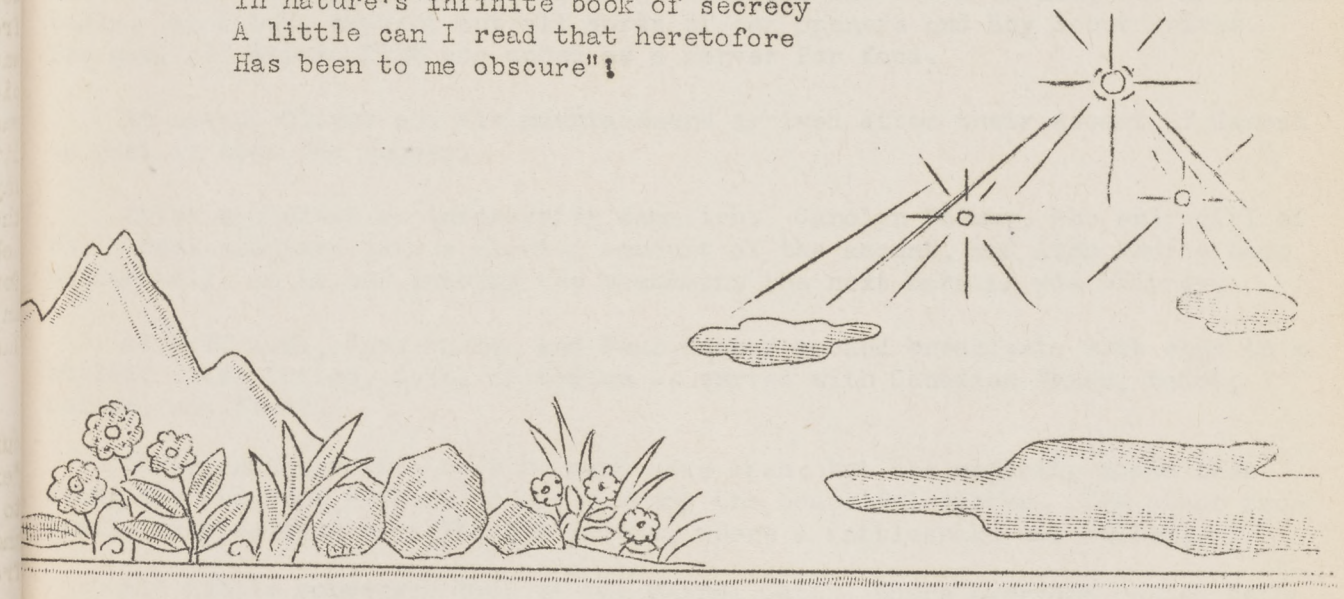
Nature puts no "ceiling" on what one can get from her infinite book -- there is no rationing of what one can get in the way of knowledge, pleasure, recreation. Also there are no priorities -- Nature's book can be perused by anyone who desires to do so. All mountaineers should automatically be classed 1-A in the army of Nature's devotees -- for them there should be no grounds for deferment.

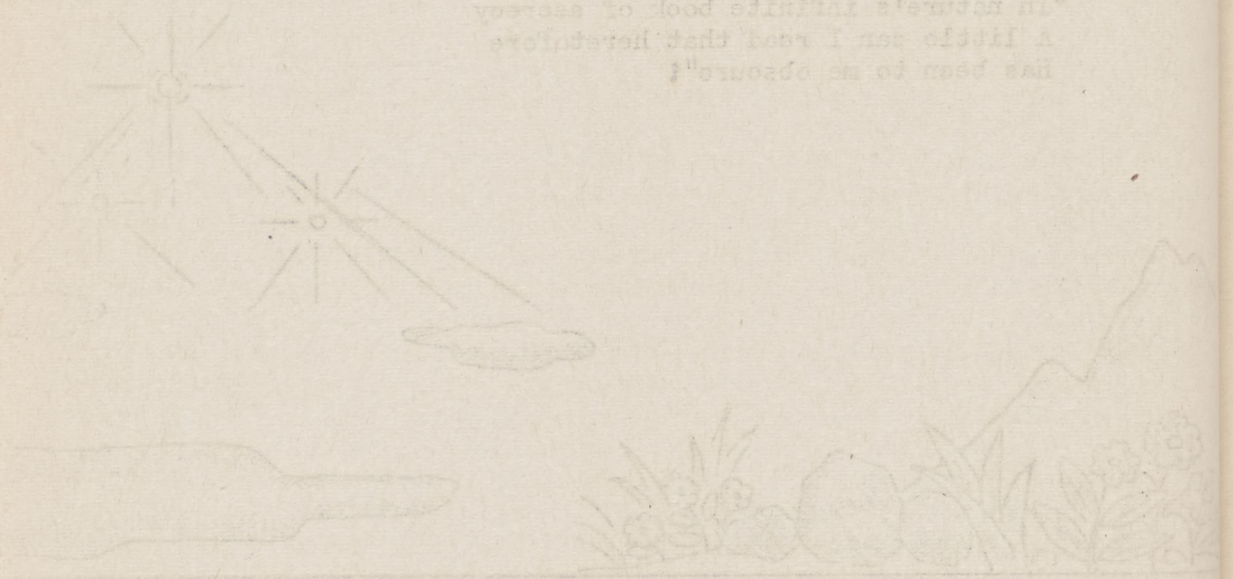
Certainly all Sierrans should be able to say with the Soothsayer in Antony and Cleopatra:

"In nature's infinite book of secrecy
A little can I read."

Our hope is that 1942 Base Campers may now add to that and say:

"In nature's infinite book of secrecy
A little can I read that heretofore
Has been to me obscure"!





# THE LURE OF MORAINE LAKE AND SKY PARLOR MEADOWS

By Marion Jones

A two-day deluxe knapsack trip was taken by some fifty Base Campers to Moraine Lake and Sky Parlor Meadows under the leadership of Tyler Van Degrift, on which we had the luxury of having our sleeping bags packed on mules. Oliver allowed but eight pounds per person for dunnage and food, with all excess (mostly food) carried on our backs.

Oliver led one party of nine climbers up the Kaweah, while the others took the trail leading down to the cabin which was fresh with wildflowers. From there we ascended to the Chagoopa Plateau on the John Muir Trail, with its numerous waterfalls, surrounded by gorgeous wild flowers, such as tiger lilies, wild onion, lupines, asters, and shooting stars. Then the trail led through woods with frequent views of the Kaweah and vistas down into the Big Arroyo. At the most spectacular points, old trees stand like sentinels guarding the Big Arroyo on overhanging rocky buttresses.

After bruncheons and luncheons in the beautiful meadows on the plateau, we finally arrived at Moraine Lake, with its forest of trees growing right down to the water front. After siestas and swimming in the warm lake we went on to Sky Parlor Meadows, the most beautiful of all meadows of the Sierra, lush with wild strawberries and a carpet of wild flowers. Here John Thomas Howell found a real Botanist Paradise.

Fred Everson and Lawrence Fuller chose a beautiful secluded campsite on the lake. A roaring fire was soon started and calls of bring down the commissary were echoed through the woods. Soon one by one the knapsacks were unloaded and the contributions consisted of corned beef hash, stewed tomatoes, bread and butter, coffee, milk, sugar, and sliced pineapple. The commissary department had sent one cooking pan, one coffee kettle, and one black bucket, but no kitchen tools. An S.O.S. brought out all sorts of can openers and Boy Scout knives. The good old Sierra Club cup acted as a server for food.

At seven, Oliver and his mountaineers arrived after their ascent of Kaweah -- just in time for supper.

Tyler conducted an interesting campfire. Carolyn Palmer, the only girl of the Kaweah climbers gave a glowing account of the ascent, and Alan McCrea bade us farewell, as he was leaving the mountains the next morning via Whitney.

At 6:00 A.M., Cope Palmer and Paul Hunter cooked breakfast, with eggs in all styles: hard boiled, soft, or medium -- served with Canadian Bacon, toast, coffee, and fruit.

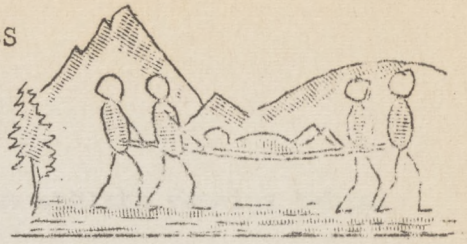
Three return-routes back to camp were open, but the majority chose that along the Chagoopa Plateau to again enjoy the beautiful vistas. The other two trails dropped down into the Big Arroyo, where a rattlesnake was killed.

All trails converged back at the Patrol Cabin, where everyone rested before making the last ascent to camp. The whole trip was a huge success due to Tyler and Oliver, and the only regret was that some there were who missed this glorious trip.



# THE SCREE-JUMPER OF SAWTOOTH PASS

Written by Emily C. House
Presented at Little Five Lakes



Scene: Somewhere in the High Sierra. A huge boulder of sufficient climbing dimensions is in the center back.

## Episode I
## Trainer and Athlete

A wirey and energetic trainer is conducting the final work-out of a husky athlete. He tests the athlete's leg muscles by having him jump rope. Satisfied on that score he next tests him on back and arm muscles. For this purpose the trainer drags in with great effort a dunnage bag which is much in excess of the allowed 45 pounds. The athlete manhandles this bag in an airy fashion, swinging it easily in circles over his head. (In reality the bag is filled with paper cartons.) Then as a final check-up, the trainer measures the athlete's lung power. The athlete blows up an air mattress with a few lusty breaths. The trainer is well satisfied and slaps the athlete on the back declaring, "You're in the pink, my Boy, in the pink! Go out there now and show them what you can do."

"What are you aiming to do?" calls a voice from the audience, "Fight Joe Louis?"

"No," answers the athlete, "Fighting Joe Louis would be a cinch. I'm going on one of Oliver Kehrlein's Grandma hikes."

## Episode II
## The Grandma Hike

Ten gay young things dressed in sunbonnets and long skirts to represent Oliver's "Grannies," come frisking in singing the chorus of the "fritteleria" hiking song.

Chorus:

Frittelee, frittelie, fritteleria
la la la la la la la la la
Frittelee, frittelie, fritteleria
la la la la la la la la la

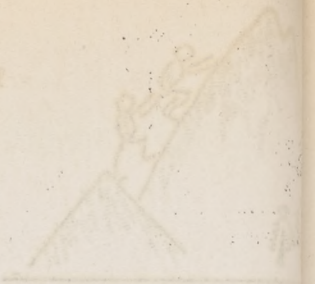
They meet the athlete and greetings are exchanged, whereupon they teach him the Granny hiking song, "Fritteleria."

Song:

1. Oh do you all know what it's like
To take an Oliver Kehrlein hike?
Oh yes we all know what it's like
To take an Oliver hike. (chorus)

2. You hang by your neck on a Minaret
And slide down glaciers soaking wet
On a "Grandma hike" you're sure to get
A thrill you'll never forget. (chorus)





3. I never saw a single granny
Who slid down glaciers on her fanny
These "Grandma hikes" will surely be
The very death of me.

The grannies exit singing the chorus and the athlete remains behind just long enough to say:

"Who ever told me I needed to go into training to take a hike with a bunch of old women like that? This is going to be EASY!"

At the end of the first mile the athlete is leading and all are singing as they clip along. The end of the fifth mile finds our athlete in the middle of the group. At the end of the tenth mile he is at the end of the line and is definitely tired. As the Grannies pause in front of the boulder to map out the trail, he sits wearily down. The Grannies break the bad news that the trail leads up "over that shoulder," (pointing to the boulder.) The athlete groans but they encourage him by saying they will help him. They help by boosting, hauling and tugging. One intrepid Granny leaps to the top of the boulder and dangles a rope down to the athlete which she has tied around her waist. They get him up and what is more they get him down, although the wear and tear on the athlete and his jeans is considerable. The chipper Grannies resume the hike singing as brightly as ever and the athlete limps dejectedly in their wake.

At the fifteenth mile the group again rounds the boulder, and although the Grannies appear as usual and disappear still singing and "going strong," no athlete puts in an appearance. After a brief pause he staggers in, only to fall prone.

Immediately a request is made for anyone in the audience who has had a course in first aid to come forward.

## Episode III
## First Aid

The response is over-whelming. A swarm of volunteers dash up. Then someone remembers her training and says, "Don't you remember? In the first aid course they taught us it was more important to know what NOT to do than what TO do?" Another says, "I think we ought to give this matter very careful consideration."

All stand in a semi-circle behind the victim and in true operatic style they burst into song.

Song: "Oh dear what can the matter be?"

The chorus is sung fast and the volunteers pace back and forth with their hands behind them and shake their heads. The verse is sung slowly and distinctly while the group stand still.

Chorus: Oh dear what can the matter be?
Dear, dear, what can the matter be?
Oh dear, what can the matter be?
Something is radically wrong!

1. It may be a fracture, it may be concussion
We must give this matter most careful discussion
The things NOT to do are so very important
We'd better do nothing at all. (chorus)

2. It may be exhaustion, it may be a sunstroke
Perhaps he has fallen and gotten his neck broke
We must be most cautious and not do the wrong thing
We'd better do nothing at all. (chorus)

3. It may be he suffers from ashpixiation
If that is the case he needs resuscitation
His lungs are depressed they need instant inflation
We'd better do nothing at all. (chorus)

4. If he should continue to just simply lie there
How shocking it would be if he were to die there
We'd better discover the cause of his trouble
We'd better do something at once!

Having at last decided on taking action, about six of the more officious souls "take over" and the others wisely dissolve back into the audience.

The first suggestion that he be given air is promptly acted upon. An air mattress is rushed to the scene and the air is released in his face. As no results result, another First Aider recalls that there are three types of unconsciousness. First there is the RED type, then the WHITE type, and lastly the BLUE type. She states he is the RED type and immediately raises his head by thrusting a bulky knapsack under it at an angle sufficient to break his neck.

At once another Aider declares he is the WHITE type and jerks the knapsack out without benefit of shock absorbers. She grabs his feet which she elevates to the point of practically standing him on his head. A third "Aider" assures them that they are both wrong as it is a clear case of BLUE unconsciousness. That, of course, calls for artificial respiration. With a commanding, "STAND ASIDE," she goes into action. Astride the hapless victim she chants:

"Out goes the bad air,
In comes the good air,
Out goes the bad air,
In comes the good air."

**********

This ritual continues. The other First Aiders chant with her and go

through the motions in rhythm with her. Exhausted she calls, "RELIEF" and is relieved.

When it becomes evident that this is a hopeless procedure the effort is given up. Ammonia is applied with no results. Then someone has a bright idea. A piece of Chef Dean's cake is held within sniffing distance of the victim's nose. Results result!

"Now that's what I call REAL First Aid," exclaims the erstwhile victim, as he grabs the cake.

He is pushed back into a recumbent position just in case "something is broken." It is noted with relief that at least his neck isn't broken as evidenced by his ability to move his fingers in grabbing the cake. Solicitiously they ask him where he hurts. As he has taken quite a beating on the trail he groans, "Everywhere!"

"In case he has some broken bones don't you think we'd better bandage him up?" suggests a First Aider, eager for the opportunity to practice a little. All fall to with alacrity and soon no mummy in the British Museum could boast more yardage. When they run out of anything left to bandage they call,

"Grannies, come and get him."

The Grannies come promptly singing and bearing a stretcher. They range themselves behind the athlete (now incognito), and laying down the stretcher they indulge in a little operatics.

SONG: Fritelleria tune

A Grandma Hike as you can see
Takes lots of courage and energy
But if you keep on and do not stop
You'll always reach the top.

The Grannies roll the "athlete" on the stretcher and assisted by the First Aiders they haul him off. All exit singing, "Fritelleria."

The announcer steps forward to assure the audience that anyone can take a "Grandma Hike," and that by the next one the athlete will be fully acclimated and capable of keeping up with any Granny.

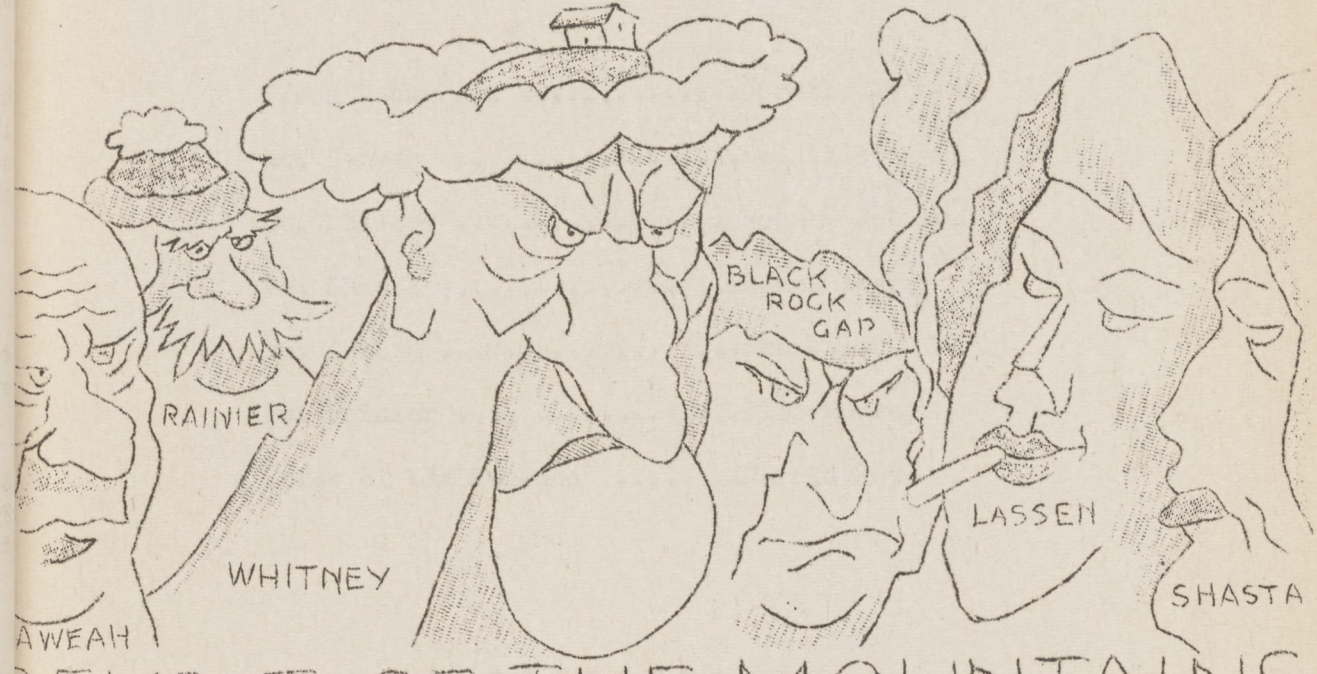
# REVOLT OF THE MOUNTAINS

## A Fantasy Of The Sierras

## In One Act

By

Harold Kaye




REVOLT OF THE MOUNTAINS

A Fantasy of the Sierra

Cliff Amphitheatre---Little Five Lakes

WED. AUGUST 5, 8:30 P.M.

PARKER SEVERSON
Per P.F.

Written and Produced for The Base Camp
of The Sierra Club, at Little Five Lakes

August - 1942



## C H A R A C T E R S

(As they appear on the stage from the audience left)

Black Rock Pass .....Dorothy Wetton

Mt. Kaweah .....Ned Allen

Mt. Whitney .....Rodney Johnson

Mt. Shasta .....Agnes Yeager

Mt. Lassen .....Sue Allen

Mt. Rainier .....Bill Murray

Voice of the Sun-God .....Harold Kaye

- - - - - - - - - - - - -

General Direction . . . . Oliver Kehrlein

Technical Effects . . . . Ottmar Goebel

# REVOLT OF THE MOUNTAINS

SCENE: A natural amphitheater in the High Sierras. On the left the stage is flanked by the side of a high mountain; and on the right by a sheer granite cliff between fifteen and twenty feet high. It is above this cliff that the Sun-god appears. The stage slopes upward and away from the audience.

There are boulders of varying size upon which the actors sit. It is important that they be grouped from the lower mountains on each side of the stage, to Whitney, the highest, near center of the stage, as this character dominates most of the scene.

The scene is lighted by huge fires that throw deep shadows, and create an indistinct reddish glow. No outlines are sharply drawn, the characters seeming to blend with and become part of the rocky landscape.

To the extreme left Black Rock Pass seems to hold hands with Mt. Kaweah, as if the former were its offspring.

As the play begins, there is a low clap of thunder.

Whitney (In a deep vibrant voice.) Noble Mountains! One Hundred Years have passed since last we met. In our part of the mountain world there has been much to cause us grief. (Low thunder) We asked you to come here, because we are being humilated - disgraced. Rivers of tears flow down the deep crevices of my face in ever increasing volume, for the man-pest has overrun our homes, and lays us low.

Are you too afflicted with this scourge?

Kaweah Great Whitney, noblest of us all, may I speak?

Whitney Kaweah, speak!

Kaweah Kinsmen, I bring to this meeting my offspring, Black Rock, who is sorely tried for one so young. I too have many grievences. But you, Shasta (Shasta nods) and you Lassen (Lassen nods) have been patient beyond mountain endurance.

For millions of years my privacy was preserved and I was lord and master of my domain. But recently I too have become afflicted with this man-pest, that in season swarms over me and causes me much misery. I have called upon the winds and the cold; the sun and the heat. I have showered him with boulder and rock - but to no avail. It seems he cannot be destroyed.

These lines on my face are not there because of age. They are caused by anxiety - lest the man-pest destroy our beauty, and cause us to become as ugly as his cities.

Black Rock (In high voice) Only a few weeks ago they swarmed over me and dug their heels into my side until it hurt. I nearly cried.

Kaweah Hush, Black Rock. Let your elders speak.

Whitney Shasta, is the man-pest also in the Northern Mountains?

Shasta It grieves me to tell you that he is there too. (Hanging head) He erected one of his lodges on my front porch. I tried to destroy it. But alas I failed.

Rainier And they make paintings of me. It is most distressing, because these paintings show only my shape - and in no way reflect my great glory or my generous soul. Then they take these monstrosities and plaster them by the hundreds along the trails that these man-pests travel over. I am helpless to stop them.

Lassen (Twittering) I might not feel so badly if someone painted me!

Whitney Blasphemy! Lassen, you must not have such thoughts. Vanity is a human weakness.

Shasta But why do they do this to you?

Rainier They say that the white foam that flows from my springs, is, with due apology to all of you, the finest in the world.

Whitney Flattery is the sharpest weapon our enemy employes.

Rainier (Continuing) And from this white foam the man-pest makes something he calls - beer. And so the incomparable waters of my fairest land are captured and polluted at my very front door. I am deeply humiliated.

Kaweah Thank the Almighty Sun that this tragedy has not yet befallen me. What can you do about it?

Rainier I try to kill! A rock misplaced....something to cause a broken leg, or better still, a broken neck.

But they keep coming. More - more, and ever more of them! I am helpless. I cannot drive them out.

Kaweah Most honorable, Whitney, we mountains, the greatest children of all creation, must stop this infamy at once. These worms that crawl over us are parasites that torture us. They must hate us to bring this curse upon us!

Whitney Aye, hate, truly they must hate us. And we too can harvest seeds of hate and nuture them upon the altars of the Sun-god. And from this hate breed more of the same venom. The time has come to throw down the gauntlet! For with hatred in our souls we can return their poison a thousand-fold. We will annihilate them--- drive them from the face of the earth.

Kaweah — But how can this be done?

Lassen — Shasta once told me, that when she was very young, and very active - belching forth gas, smoke and great streams of lava - she was able to drive the man-pests away.

Shasta — Yes, that is true.

Lassen — For years I have been generating gas. I promised to refrain from erupting because you do not like my dust and ash to blow in your faces. But now it is different! With great pressure within me, I can give vent to my feelings and become a mountain of fire, that will help you drive the lowest of the low from our midst.

Shasta — Humans cannot live where we erupt. Centuries before you were afflicted, Lassen, I poured forth smoke, flame and rock and the man-pest fled before my salava.

Now I am old. You have youth...a fiery disposition. I release you from your promise to withhold your scorching breath. Go! Burn! Scorch! Sear them all, and drive them out!

Rainier — And can you help?

Shasta — They call me the old witch of the mountains...because I have killed the most daring, the most reckless of them. I may be old, but I'll stir the innermost recesses of my bowels and once again belch forth flame and fire; smoke and lava,--and drive these beasts from our sacred groves. This will free us - for all time to come.

Kaweah — Great sisters! Would that I might spread fire and destruction!

Rainier — Far down in the earth, nearly rusted from lack of use, I too have smoldering lava. I'll join you in the onslaught and pray the Snow-god to add snow and ever more snow, to help us wash the vermin from our lives.

Kaweah — And I'll cause the towering rocks of my citadels to shake loose with the movement of the earth. I'll open wide, and swallow them ... crush them ... and with your help we'll all be free again.

Black Rock — You say we'll be free?

Kaweah — Yes, free to follow our own way of life without the interference of these pests; free to live by ourselves, as we have always lived throughout the ages!

(Pause after this crescendo)

Rainier — Brother Whitney, you seem strangely silent. Have you naught to say?

Lassen — Do you think we can drive back the man-pest with our fiery breath?

Whitney — Yes; your hot breath would cause the enemy to withdraw. But for how long? Anger is but a passing emotion. You will be out of breath in a few years, and then your anger will cool. You will become cold - old - extinct, like Shasta. And then the man-pest will return again.

Our inaccessibility no longer prevails against him. The ruthlessness of our violent winters, and the rarified atmosphere in which we rear our proud pinnacles have failed to repulse him. Despite our apparent strength - and the massive cliffs that have buttressed us for centuries - we are weak.

Black Rock — Am I very weak, Kaweah?

Whitney — But we are not helpless. For there is still a power greater than man!

Shasta — My years do not bring me the wisdom to know what you mean.

Lassen — Tell us--

Rainier — What do you mean--

Kaweah — Can we be saved?

Whitney — Do you not remember our glorious history...our unconquerable past? Have you forgotten our Sun-god to whom we owe all? Was it not He who caused the ice sheets to melt-- and leave our mountain family supreme in the world? We survived the ice, when all else perished! Let us once again call upon our Sun-god and entreat him to turn his face to other worlds. Ask that he look away from this world that once again all may freeze and perish except ourselves.

Shasta — A noble thought.

Kaweah — It is many centuries since we called upon him.

Rainier — But will he hear us?

Whitney — Let us pray. Let us have faith that he will heed us, and help us.

Oh, Thou Mighty Sun
Whom we worship thru the ages,
Hear our prayer.

We thank Thee, for the heat of your life-giving countenance - that drove the glaciers from the backs of our forefathers, and freed them from frozen bondage.

We thank Thee for our laughing flowers,
friendly trees, nesting birds,
and all of the glorious color of our world.

Enter Sun-god
(This is a glowing golden ball of fire, that gradually rises above the cliff at the right of the stage)

Whitney (Continuing the prayer)

But now we are sorely tried,
Proud mountains-once,
Slave mountains-now.

Shorn of beauty -
defaced, deformed and defiled.

Our noblest heritage lost,
For we are no longer free.

Hear us! Great Sun-god!
For you alone can save us! Amen.

(Upon completion of the prayer, the mountains raise their heads, and see that the Sun-god has appeared. There is an exclamation of surprise and gratification)

Black Rock What is that?

Kaweah Shush! that is He!

There is a long pause.

Whitney Merciful One, you have heard our prayer.

Sun-god Are you not my children?

Whitney Each day your warm rays play and dance with us, and bring us great happiness. For many centuries we have had no cause to complain. But now our sublime and peaceful lives are disrupted by the depredations of the man-pest.

Sun-god My warm rays also shine on him.

Whitney Unfortunately that is true. But a million years ago when our ancestors prayed to you to loosen the grip of the giant glaciers, by turning your warmth upon them, - and thereby restoring our mountain freedom, - you did so. You compelled the ice to recede - our freedom returned, and you changed the tomb-like silence of the glaciers for the song of the birds - and the music of the pines.

These centuries of freedom have been the golden age of our existence. For this period of unbounded happiness, we thank Thee again.
But now there is an enemy in our midst!

Sun-god And who is this enemy?

Whitney — The man-pest!

Sun-god — Do you mean, man?

Whitney — Yes.

Sun-god — He too is one of my children. Wherefore are you so offended?

Whitney — He is over-running our forests, our summits, ourselves. He has crowned our brow with a house that weighs heavily because it is ugly, like those he uses below.

Rainier — And he is laying waste my forests, mutilating the trees and flowers that you have placed there. The firs that cloth me are being ruthlessly stripped from my very back. The beauty you endowed me with is being destroyed.

Kaweah — My sharp rocks and lofty peaks cannot keep him from trampling over me. They can no longer keep him from reaching my uppermost summit and there planting his feet on my head.

Rainier — And when I rear my head to the sky, seeking solitude, the man-pest races up and down and across my snows on flat pieces of wood, until every vestage of my dignity is lost.

Black Rock — They have gouged out ugly ruts to walk on - all over my sides. It will take centuries to repair the damage.

Lassen — They use me for a playground. I cannot think amid such raucous noises and vulgar actions.

Shasta — They use my tears for their commerce and profit.

Rainier — And I have been cheapened and degraded.

Whitney — Great One! You released our forefathers from the death and tyranny of the glaciers. Now we are imprisoned by the tyranny of man.

Sun-god — There are different kinds of tyranny. There is the tyranny of love, as well as the tyranny of hate. The one destroying, the other ennobling. But what would you that I do?

Whitney — We pray that you turn your face to other worlds in order that once again our world may don its cloak of ice. Let the ice packs come and choke us with their frozen fingers as they held our ancestors before us. For when we feel the weight of the great ice crushing our breast, we will know that all man-kind is dead!

Sun-god — To crush man, you would also crush yourselves. And destroy all that has taken so long - with so much pain - to build.

Whitney — We survived great ice - where all else died. Better be dead - than slave.

Sun-god — Your friends, the plants and the trees would also die. Do you not think of them?

Whitney — We all suffer. But the purge will cleanse our souls.

Sun-god — A dead mountain has no soul. What you propose would kill the flower of life and keep the mass of rock buried under the ice. You would kill the substance of life and keep only the shadow.

My children - my most favored children - and I call you this because you are the highest, and the closest to me, I understand your anguish. But the world you live in changes. And you too must change, for the days when you could live unto yourselves alone has passed. The time has come when you must give of yourselves to the world - of which you are a part.

(scolding) Too long have you held yourselves aloof. Those who visit you come not as enemies, but as friends. They are the ones who would protect you against the knaves who would destroy your coats of fir and ruin your beauty. They stop the vandals who would disfigure you with wide ugly roads that would pierce your very heart. You call them pests? There are many among them, who love you. You turn to me because you have suffered. Man suffers too. Wherever he lives in the world today, he is sorely tried. These man-children of mine are locked in a death grip...half the world trying to enslave and destroy the other half. Suffering such as you have never known. And they come to you for help. Your beauty is balm for their woes.

And you pray that I destroy them and this world you live in. I will not! I will make it ever more beautiful.....Some day the man-child too, will learn.

Whitney — Why . . . why should the man-child destroy each other?

Sun-god — For the same reason you asked me to turn my face to other worlds. You wanted all - or none. Greed! Avarice! Envy! The grasping ones want me to turn my face away, so they can kill - and while killing, kill themselves!

Exit - Sun-god

Whitney — Did you hear?

All — (With awe) Yes.

Rainier — These man-pests are his children, too!

Kaweah — I never thought of that before.

Shasta — And he said, "they love us" ....

Whitney — And they are our friends.....

Lassen — Never before did I know we have so much -

Kaweah — Or that we have so much to learn.

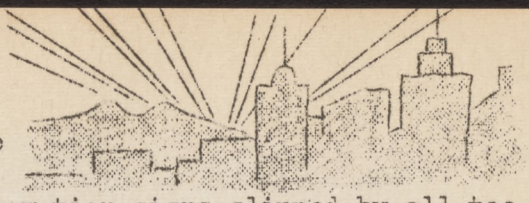
Whitney — And I thought that we were the whole wide world!

C U R T A I N



# AN AFTERGLOW

By Katherine Kaye



Homeward bound from Base Camp ... the elevation signs slipped by all too fast as we dropped lower and lower into the hot valley. Civilization rolled up in waves to meet us, but we still looked everywhere for reminders of mountain life in our reluctance to let it go. Hilarity broke out at dinner when we continued to speak camp language: How best to reach a certain restaurant-- keep to the trail, or couldn't we contour? ... Soup's on-- come and get it! ... Somebody left his cup in the car-- now how could he get his soup? ... and don't forget to leave the spoons where they belong instead of slipping them into jeans pockets!

As we drove on up the state we spoke in eager reminiscence of other contrasts. This lazy valley river that we crossed-- two days ago we sat instead beside the bright rush and tumble of a mountain brook. A sign, pointing with name and arrow to some small town off the highway, changed under the alchemy of memory to the familiar black and orange Sierra Club arrow, reassuring the hiker on his way. Day faded away across the valley and we saw vividly our little lake smoothed of ripples, reflecting the high sunset and the splendor of the Kaweahs. A glow of ligh ahead showed where a city stood, but two days before the glow was our campfire, signalling us through the woods to gather about its friendly blaze Headlights were switched on, and oncoming cars twinkled in a long procession; we saw instead the twinkle of flashlights moving away from campfire to the sound of group singing and sleepy laughter ...

Darkness settled thickly about us, shutting out town and flat countryside, and whole scenes from our mountain days crowded back to mind. The small difficulties of cold and heat, hungry mosquitoes, steep zigs and dusty zags of trail, diminished to the vanishing point under the benison of the high country and were remembered only as a tang enhancing the beauty we had won. Once again we walked down through the hanging gardens of Timber Gap Creek -- again the achievement of barren Black Rock Pass rewarded with its exhilarating horizons. The Kaweahs stood beyond our lake camp, now smiling out with the first morning light, now sharp and handsome under the moon sun, now ethereal and breathtakingly lovely in sunset and twilight. We looked once more across idyllic Sky Parlor Meadow, its lawns and forest edges dreaming in the late golden sunshine.

The rushing mountain wind swept past us afresh on Kaweah Gap, blowing up-canyon from the heroic crags of the Gardens of Walhalla, and we caught our breath at the vastly contrasting beauty of the tremendous gorge and of the fragile yellow columbine nodding on the rocks beside us. We stood again at the brink of Precipice Lake, yielding for a moment to the mood of enchantment and fantasy which filled that high amphitheatre with its walls of black rock laced in silver by runnels of melting snow, and in whose cup lay the black mirror of the lake frosted with ice of diamond white and peacock blue. Again we sat around the big campfires, the warm light reflecting on faces and forest in a pattern as old as mankind; again found our way to our beds under the trees and to "a sleep of swee dreams, and health, and quiet breathing." Once more we looked down into the intense blue and pale ice green of Columbine Lake, once more sat on the summit rocks of Sawtooth Peak "in the white windy presence of eternity." Before us spread again the matchless Sierra range, eloquent with the wisdom and majesty of the slow passage of ages, beautiful with the clean-swept simplicity of high places. Piling clouds drew shifting shadows and cool color-tones across peaks and plateaus, and soft dim curtains of rain fell slanting in the far distance ..

When the car radio penetrated our consciousness again, bringing us abruptly back to the civilization of lowland and city, someone was singing "Home on the Range." We listened, happy in the knowledge that we had been privileged to feel at home on another range-- the High Sierras.

# BURROS ARE FUN

By Haven Jorgensen

Fifteen members, eleven men and four women, mixed thoroughly with ten docile donkeys and the beautiful high Sierra, maintained burro trip tradition with another fine trip. Leaving the good old swimming pool and a nice base camp at Jackass Meadows, the party skirted Florence Lake and followed up the San Joaquin, reaching the Evolution region by easy stages. That area thoroughly explored, the group dropped down to Piute Creek, and up the stream to Hutchinson Meadows. Dominated by Mount Humphreys, this proved a pleasing setting for the concluding days of the outing.

Mountain climbing was a popular pastime, with the Hermit, Mount Darwin, Pilot Knob and Mount Humphreys rewarding the climbers with superb views and that exalted feeling that only comes with conquering a worthy peak. The flash of golden and rainbow trout rising to a fly thrilled anglers, and many a plump trout found its way to the breakfast table to help ease hearty appetites.

Menus were well planned and with the aid of the Hildebrands' "Camp Catering," and plenty of imagination, amateurs became professional cooks, preparing delicious and superlative dishes. The mysteries of how to saddle, pack, throw a hitch, and all the phases of burro technique, were quickly assimilated, and it was a veteran bunch of packers that headed their animals down the homeward trail.

Yes, as the group of tanned, hardy mountaineers regretfully said their goodbyes, all agreed it was a grand trip and burros are fun.





SADDLE TRIP - 1942

By Naida Gilmore

At one low moment it was thought there would be no Saddle Trip this year, and loud was the cheering when Dave Brower finally agreed to be our leader and forsake his cliffs for a horse named "Honey Bun."

I don't think anyone really appreciates the thrill of starting up into the blue who hasn't sat on the hay, ice, and general miscellany in the back of a Buckman truck on an August afternoon in Exeter! Especially if they arrive in a crackling thunder shower and take shelter for two hours in one of the four by four houses with which the slopes of Mineral King abound!

First dinner on August Ninth brought together five repeaters and ten tenderfeet who had their first taste of Martin Brady's amazing cooking. The commissary may have had it's worries, but no shortages were felt by the gorging guests. The wood and water department was ably handled by Haven Jorgensen of Burro Trip fame, and the repeaters especially noticed Barbara Norris' feminine touch to our meals.

It would please Ike Livermore to hear everyone agree the horses were the best yet. Our route led over Franklin Pass and down the Kern; up Golden Trout Creek to Rock Creek; over Siberian Pass to Crabtree Meadow with a thrilling side trip to the top of Mount Whitney. Then down into Big Arroyo and up to delightful Moraine Lake; past Little Five Lakes to Black Rock Pass and home by Pinto Lake and Timber Gap. There may have been a schedule when we started but the vote was for more short days in the saddle and fewer lay over days. This allowed ample time in the afternoons for fishing, swimming and picture taking.

While the group was small as Sierra trips go, they were notable for their friendliness and cooperation. Dave's accordion added much to our amusing campfires which included everything from a minstrel show to a successful snipe hunt. We particularly relished Buck Cooper's gripping verses.

The balmy weather and beautiful scenery combined to make us sorry to return and it was only our horses who seemed pleased when we were homeward bound.







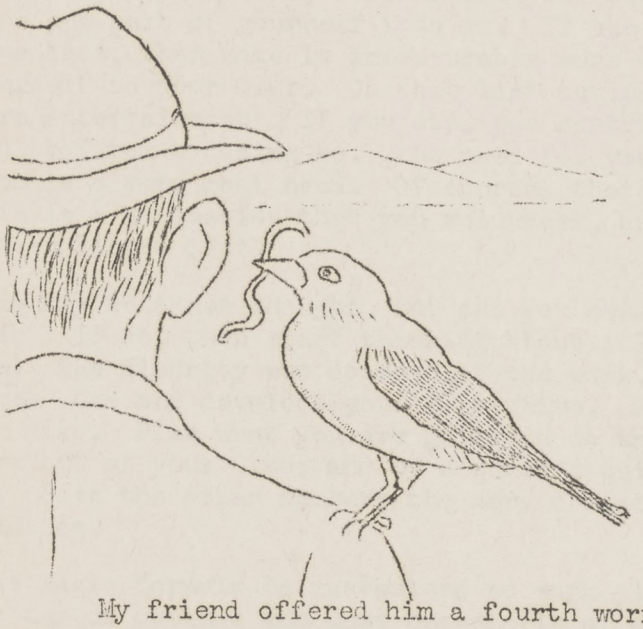
STORY ABOUT THE CLARK'S CROW OR NUTHATCH

As told by Bill Hasselbrock

On a fishing trip in the High Sierra in one of the lakes above Tahoe, a young man saw a Clark's Crow, or Clark's Nuthatch. He considered the Clark's Crow one of the most intelligent birds of which he knew, and planned to capture the bird alive. He was a most wonderful shot and awaited an opportunity when the position of the bird high up in the air was such that he could shoot at it, so as not to injure it.

In firing at the bird, he succeeded in clipping off the tips of a few feathers in its wing, and as the bird could no longer keep a perfect balance in its flight with this unequal wing-spread, the Clark's Crow slowly circled to the ground, where it was easily captured.

The bird was then confined in camp a few days with a string about its neck and became quite tame, and would take worms out of the hands of its captor. These worms were dug out of the mud in a creek and kept in a tin can.



Driving back to San Francisco, the bird's captor sat in the rear seat of the car, and the bird perched on his shoulder. After they had driven for a while the can of worms was produced. The Clark's Crow at once fluttered down the young man's arm to perch on his wrist, eager for a meal. Clark was given three worms, which seemed to be all the bird desired, as he fluttered back up the young man's arm to his owner's shoulder, rather than to remain on his wrist.

My friend offered him a fourth worm there, but the bird seemed not to want it and pecked at the young man's ear. But the young man opened the bird's bill with two of his fingers and forced the worm into the bird's bill with the other two. The bird sat on the shoulder for an instant with the long worm hanging down from his bill. Then he quickly hopped down the young man's arm again until he reached the wrist, then cocked his head sideways, looking with one eye toward the can, which the owner still held in his hand, then deliberately dropped the worm back in the can, as much as to say, "Let's save the worm till the next meal," and then hopped back to his perch on the young man's shoulder.





# HOW TO ENJOY YOUR CLUB TO THE FULLEST EXTENT



If you want to wring every last drop of value, personal satisfaction and pleasure out of your Sierra Club membership, here is the formula: Express yourself by aiding to create pleasure for the other fellow.

This implies some effort on your part but it pays big dividends. Your greatest rewards come as the results of effort, do they not? Of course they do. Self-expression is a great satisfaction because you create something that did not exist before.

If you are at a party or on an outing where your objective is pleasure for yourself, then create some pleasure. A game is more fun for the player than for the spectator. So get into the game. Be a leader if you are an extrovert and like leading; if not, be a willing and loyal follower. The main thing is to do your bit. If you do contribute, its your party. If you do not contribute, other than the honor of your presence, its not your party, its the other fellows party and you are a bystander. Yes - you are a mere bystander and cheating yourself out of a whale of a good time.

If you like your Club, help create your Club and make it better because you have put part of yourself into it. If the Sierra Club is a pleasant part of your life, then make it immeasurably more worthwhile by giving something of yourself to your Club. On that last outing, did you take a part in the campfire entertainment? If you did, you contributed something of value to others and profited by doing so. The need for your help in running the affairs of the Club is a very real need. Of course, there is nothing compulsory about it, but this is a suggestion that you volunteer, and encourage others, to help build a better Sierra Club.

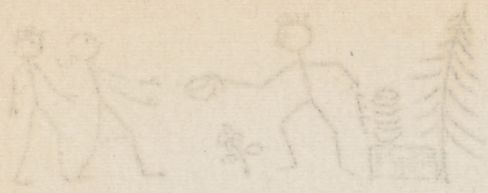
This may be a new thought, but are you cheating yourself by demanding a free ride? If so, then start thinking about it! Start doing something about it now! The minority who do most of the work, want and need you. Get into the game. Use and develope your initiative. Do your very best in whatever part you play. Plan what you are going to do and complete that plan. You will get more out of your Club; and by a strange quirk of arithmetic, so will the rest of us. Give the other members the very definite advantage of your help and guidance.

This magic formula is guaranteed to work all year but is especially recommended for use on outings and most especially of all, on Base Camp Trips.

The Working Members

By R. J.

(Note: R.J. expressed this constructive suggestion at one of the campfires. We asked him to put it in writing. He has done so in his usual straight from the shoulder manner. Fortunately, we feel that very few of this year's outing members were droves and can take this as a personal criticism. O.K.)





# ASCENT OF WEST SPUR OF THE BLACK KAWEAH

By Paul Hunter

August 3, we set out from 1942 Base Camp in Little Five Lakes Basin to explore Nine Lake Basin and confirm the report of an existant glacier. Present: Oliver Kehrlein (leader), Carolyn Palmer, Fred Johnson, Copeland Palmer, Paul Hunter.

Dean Curtis had given us such a good breakfast that we couldn't fail to accomplish something. We left the John Muir Trail about a mile and a half below Kaweah Gap, and headed diagonally up the east slope, in order to obtain a birdseye view of Nine Lake Basin. We found plenty of pinus albicaulis, but no glacier. The ridge on which we found ourselves ran diagonally from east of Kaweah Gap toward the Black Kaweah summit.

One or two climbers were observed gazing longingly toward the Black Kaweah, so, although we hadn't planned to climb it, we changed our course upward and to southeast, in the hope of obtaining a close view of the summit pinnacle. After a short trek on the ridge we contoured around two couloirs to the southeast and ascended a wide one toward what appeared to be the summit.

The rocks on the spur, from start to finish, were very treacherous and extreme care was necessary to avoid dislodging them onto the persons below. We headed for a snowdrift near the sky line, and found that it was melting freely at the elevation of 13,200 feet. By scooping a small dam, we obtained excellent water.

We climbed about 300 feet more, crossed a sharp buttress to the south for our first glimpse of Black Kaweah, about a quarter-mile east, but hopelessly distant at 1:00 P.M., considering all the slow rock work required. We cached our packs and ice axes here and completed the ascent (perhaps a first) of the west spur, using the rope for safety at one point. Finding no record of previous ascent, we erected a cairn and signed up. The view was similar to that from the Kaweah to the southwest, but was cut off to the east and far more extensive to the north.

Good view: Nine Lake Basin almost under us, with blue water of many shades, as well as ice and snow. There was no flat surface on the west peak, so it was necessary to hold tight on the knife-like edge. Pebbles dropped on north side sailed clear for a considerable distance.

Returning to our cache we were obliged to rope together again until we arrived above the spring. We lunched at the spring and dropped down the wide couloir, in a more direct return route, using utmost care to avoid dislodging rocks. All went well until nearly off the bad rocks, when the second climber almost "rubbed out" the leader under a 200 pound boulder, but Oliver Kehrlein was too fast and outran the boulder in a circutuous down-hill course.

We approached what resembled a cliff, but it petered out and we reached timberline and a lovely hanging garden along a ledge as we entered the Big Arroyo. The water was welcome, as we had found only one source during the day.

Our return route lay in a beeline contour through the woods, coming out near the top of the switchbacks above the Big Arroyo ranger station. We reached Base Camp during the dinner hour, and enjoyed Dean Curtis' deluxe chicken dinner. A perfect day!

# ASCENT OF MT. KAWEAH

By Paul Hunter

"Off" at 6:00 a.m. to climb the "Big" Kaweah on the way to the one-night camp at Moraine Lake, we encountered our first obstacle in the form of frost encrusted log across the Big Arroyo. After our leader had overcome this setback, John Thomas Howell obtained "the" botanical specimen of the season, or one of them, right at the vacant ranger-station corral.

At a small lake where the trail entered the Chagoopa Plateau we cached our packs and began the ascent on a crescent-route, to come out at the col directly northwest of the summit. This avoided some rough rock scrambling and steep snow-banks. John Thomas Howell brought up the rear, collecting en route. At timber-line we found a single specimen of pinus albicaulis among the storm beaten foxtail.

At the col we rested briefly in the shelter of rocks out of the wind. A short climb from there brought us to the false summit on the northwest end of the summit ridge, where we put a small cairn. Then we crossed a few hundred feet of ridge-rocks to the true summit.

The view from Mt. Kaweah's 13,816 foot summit is probably one of the best in the Sierra, covering as it does a complete circle of grand mountain scenery devoid of any visible man-made improvements, with the single exception of the stone-house on Mt. Whitney.

Among other things, we saw:

Mts. Goddard, Banner, Ritter, the Red Kaweah, Alta Peak, Mt. Silliman, Moose Lake, Moro Rock, Panther Peak; The Great Western Divide (Mts. Stewart, Eisen, Eagle Scout (Peak), Lippincott, Sawtooth (Peak); Big Five Lakes Basin, Little Five Lakes Basin (Base Camp), Lost Canyon, Soda Creek, Moraine Lake, Kern River Canyon, Crabtree Meadows, The Tehachapi, Kaweah Gap, Big Arroyo, San Gabriel Range, and San Bernardino Mts., and the peaks of crest, Langley, LeConte, Mallory, Irvine, Whitney, Russell, Barnard, Tyndall, Williamson and the King Kern Divide. A lake immediately below Mt. Kaweah, on the northside, was still covered with ice and snow.

Our descent was by a different route, almost a straight line from the summit toward our cached packs. At one point we veered slightly to the southeast to avoid a sheer cliff. After a long, hot day we finally reached a stream (our first water) in a meadow filled with wild onions.

"Three miles more" they said, would bring us to Moraine Lake. But the last short miles stretched and stretched until they became six long miles. Although tired, we seemed to gain vigor with each mile through the beautiful pine forest on the Chagoopa Plateau. The trail sloped gently, until, near the lake, it descended more abruptly.

We reached the camp at Moraine Lake about half an hour before dark to enjoy the corned beef hash and hot drinks that Marion Jones and Cohorts had ready for us and the campfire organized by Tyler Van Degrift.

Mileage: Approximately eighteen and differences in elevation 4000 feet.

Present: Oliver Kehrlein (leader), Cope Palmer (ass't leader), Fred Johnson, Walter Marx, Homer Wellman, Peter Kehrlein, Carolyn Palmer, John Thomas Howell, Parker Severson and Paul Hunter.

# BASE CAMP BOTANY, 1942

By John Thomas Howell

The plants collected between July 24 and August 8 on the 1942 Base Camp Outing of the Sierra Club came from three readily defined areas in the southern Sierra Nevada in Tulare County, California: from Mineral King and vicinity; from the east and west slopes of the Great Western Divide (i.e., the "Sawtooth Range") from Sawtooth Pass to Kaweah Gap; and from the east side of Big Arroyo from a point at an elevation of 9,900 ft. in the Big Arroyo to the southern end of the Chagoopa Plateau at Sky Parlor Meadow. In the Mineral King area, collections were made between Farewell Gap on the south and Timber Gap on the north, as well as on the Eagle Lake Trail where Phacelia orogenes Brand was sought out at its type locality. In the second district, the collecting centered in the Little Five Lakes Basin where the Base Camp was located, but considerable and diversified collections were obtained from Cliff Creek Canyon, from Kaweah Gap and the Hamilton Lakes, and from Lost Canyon and Columbine Lake below Sawtooth Pass. Perhaps the richest and most interesting part of the entire collection came from the region east of Big Arroyo where plants were obtained not only from the lush meadows and sandy flats on the Chagoopa Plateau, but even to the top of Mt. Kaweah which is the highest peak in the entire region. (In the following report I call the meadows near the southern base of Mt. Kaweah at the north end of Chagoopa Plateau the Kaweah Meadows; Sky Parlor Meadow at th south end of Chagoopa Plateau was formerly known as Upper Funston Meadow.)

In all, 810 specimens were collected representing 515 species, subspecies and varieties. This is the largest and most diversified collection yet made on a Base Camp outing. Of the number of kinds, 114 are new to Base Camp lists of Sierran plants. In these lists (Base Camp Botany, 1940, 1941, 1942), we have now named 709 kinds of Sierran plants from one or more localities. These figures do not include the liverworts which are the only non-vascular cryptogams

extensively collected. In 1940 and 1941, 133 specimens of liverworts were collected, and from the collections five kinds new to California have been reported by Mrs. E. C. Sutliffe, who is at present determining the 1942 collections.

So imposing a collection could not have been made without the generous cooperation and help of my fellow Base Campers. For example, Lila McKinne graciously disregarded my appropriation of the accumulation of her precious San Francisco Chronicle at Mineral King. If I hadn't had those newspapers and more donated by other Base Campers, I would have missed out on many a good plant in Cliff Creek Canyon and on Black Rock Pass. Then, on our way down Mt. Kaweah, Paul Hunter, seeing my bulging press in one hand and my plant-pick in the other, insisted on carrying the latter for me so that I might have one hand free to collect a few more plants in our descent. (The rare Crepis nana was one of these.) And when I was away from camp, Bill Hasselbrock and Fred Peake kept a weather eye on my bundles of drying specimens, so that they wouldn't be injured if there was a shower. In ways like these, Base Campers helped time and again. Hans Leschke was my amiable companion on several of the longer trips, and I am grateful to him not only for his sympathetic interest in my endeavors but also for getting me back to camp more than once in time for supper.

So, like Topsy, my collection "jus' growed and growed", and by the time we returned to Mineral King the formidable stack of specimens presented a real problem in present-day transportation. To Charles Townsend I am deeply endebted for bringing the entire collection from Mineral King to the Academy in San Francisco: by translocation, a pile of mountain hay such as any cony might gather and hoard was transmuted into scientific specimens that make possible the following report! And without the constant aid and encouragement of Oliver Kehrlein, our impressive collection and list would not have been possible. To him I am especially grateful.

California Academy of Sciences
September 10, 1942

Botrychium simplex Hitch. Little Grape-fern.
Little Five Lakes (17374); Sky Parlor Meadow (17543). The Little Grape-fern, the most noted plant of the 1940 Base Camp, did not seem as common around the Little Five Lakes as it is in the Sierra farther north.

Asplenium septentrionale (L.) Hoffm. (Det. C. A. Weatherby.)
Think of finding a new fern for California! This particular one is not uncommon in Europe but is rare in North America, and before its discovery in crevices of granite rocks above Columbine Lake (17803), it was unknown in California.

Athyrium americanum (Butters) Maxon. Alpine Lady-fern.
Kaweah Gap (17621). The luxuriant beauty of this fern seems incongruous with the harsh alpine surroundings where it thrives. It was this fern that presented so memorable a sight in the steep rocky defile above Columbine Lake along our route to Sawtooth Pass.

Cheilanthes gracillima D. C. Eaton. Lace-fern.
Eagle Lake Trail (17168). According to the books, this fern has never before been found south of Mariposa Co. It is very common on subalpine rocks around Yosemite and Tahoe.

Cheilanthes siliquosa Maxon. Indian's Dream.
Between Pinto Lake and Black Rock Pass (17337). One good plant deserves another! This attractive lace-fern was the leader which brought us to Phacelia Eisenii, which we would probably have overlooked otherwise. Marion Jones was there when these plants were collected and she can tell you all about them in her inimitable way.

Cryptogramma acrostichoides R. Br. American Parsley-fern.
Little Five Lakes (17769). The scientific name of the Parsley Fern is one Peter Kehrlein remembers, a mouth-filling epithet, no?

Cystopteris fragilis (L.) Bernh. Fragile Fern.
Mineral King (17141); between Pinto Lake and Black Rock Pass (17344). A widespread and common fern that is always a pleasure to see.

Pellaea Breweri D. C. Eaton. Brewer's Cliff-brake.
Hamilton Lakes (17650); Little Five Lakes.

Pellaea Bridgesii Hook. Bridges' Cliff-brake.
Between Sawtooth Pass and Mineral King (17822). Only the fact that Bridges' Cliff-brake was not already in the Base Camp collection induced me to pause and collect on that memorable and unsavory descent from Sawtooth to Mineral King.

Pteridium aquilinum (L.) Kuhn var. pubescens Underw. Bracken.
Between Big Arroyo and Chagoopa Plateau (17695).

Woodsia scopulina D. C. Eaton. Mountain Woodsia.
Hamilton Lakes (17656); between Chagoopa Plateau and Big Arroyo (17749). The Mountain Woodsia, rather rare in the Sierra, was locally common at the first of the Hamilton Lakes below Precipice Lake. We are grateful to Oliver, who so strongly recommended the descent to the first lake below Precipice Lake, not only for the magnificent view but also for the abundant Woodsia.

Isoetes Howellii Engelm. Howell's Quillwort.
Little Five Lakes (17410, 17594, 17665). Great diversity was displayed by these plants but according to Dr. Norma E. Pheiffer all are probably the same. No. 17665 grew in a shallow pond near the "corral" in less than a foot of water. The other two grew on the bottom of the men's bathbub in 3 to 4 feet of water and were obtainable only when one was bathing! The Isoetes at Moraine Lake is still there because there wasn't enough time for a bath! Howell's Quillwort was named for the late Thomas Howell of Portland, Oregon.

Equisetum arvense L. Common Horsetail.
Mineral King (17092).

Equisetum kansanum Schaffn. Scouring-rush.
Mineral King (17135).
Selaginella Watsonii Underw. Alpine Moss-fern.
Mt. Kaweah (17492). To find this moss-fern at an elevation of more than 13,000 ft. was unexpected.

## CONIFERS

Abies concolor Lindl. White Fir.
Throughout the Base Camp outing we were in high country, and we hardly needed the trees to tell us why we were puffing for more air whenever we were strenuous. So it is not surprising that we met the White Fir, a trusty indicator of the Sierran Transition Zone, at only two points on the whole trip--at Mineral King (Cold Spring Camp Ground) and at the Cliff Creek crossing below Timber Gap.
Abies magnifica Murr. Red Fir.
Base Camping at 10,500 ft. was a little high even for the Red Fir, so we did not have the pleasure of having it at Little Five Lakes. However there were beautiful specimens (not over 200 feet tall, it will be remembered) where we camped at Mineral King. It formed the timber in Timber Gap. It also grew with the White Fir at the Cliff Creek Crossing and thus afforded the too-often-pedagogical botanist an opportunity to tell a pair of Ruths (Seale and Wale) how to tell a pair of firs apart by their needles.
Pinus albicaulis Engelm. White-bark Pine.
Black Kaweah (Oliver Kehrlein); Mt. Kaweah (17458). I was hoping we had found the Albicaulis at the southern limit of its distribution when we found it on the Kaweahs, but apparently it goes still a bit farther south; Sudworth reports it from as far south as the headwaters of the Little Kern River. At timberline on the Big Kaweah I saw only a single specimen, the more common timberline pines being Foxtail and Lodgepole.
Pinus Balfouriana Murr. Foxtail Pine.
As at East Lake in 1940, this year we were again camping among the Foxtails, the noblest of the timberline pines, the joy of the photographer, the inspiration of the artist, the delight of the scientist, the admiration of the mountaineer, the apotheosis of life among the peaks. Only in two regions in all the world do Foxtails grow, the Siskiyou area in northwestern California and in the southern Sierra Nevada. This year we met our first Foxtails above Pinto Lake as we climbed to Black Rock Pass. I collected specimens on the trail to Chagoopa Plateau (17437) and at timberline on Mt. Kaweah (17457); and I especially noted specimens along the trail to Farewell Gap. To my botanical eye, Leland Curtis' studies of the Foxtail were among the choicest pictures in the fine series of drawings which he did on the Club outings this summer.
Pinus Jeffreyi Murr. Jeffrey Pine.
The Jeffrey Pine was not common along our route. I noted it at Mineral King and at the Big Arroyo look-out on Chagoopa Plateau, I saw a single individual.
Pinus monticola Dougl. Mountain White Pine.
For the most part, Base Camp life was too high even for the Mountain White Pine. It was well-developed where we camped above Mineral King and there were beautiful specimens along the trail to Big Arroyo below Little Five Lakes.
Pinus Murrayana Balf. Lodgepole Pine.
That was surely a husky Lodgepole Peter Friedricksen tumbled in the wrong direction at Little Five Lakes--husky enough for the mainstay of the big circus tent--40 in. in diameter, 2 1/2 ft. above the ground. Dr. Hallock counted just over 500 annual rings on the clean-cut stump--which is about twice the age usually given as maximum for the Lodgepole Pine. Dr.

Irma S. Webber examined the wood and pronounced it Lodgepole. On Mt. Kaweah the Lodgepole Pine is a timberline tree (17459). In fact the highest "tree" seen on Mt. Kaweah at about 11,500 ft. was a Lodgepole Pine. The Lodgepole Pine is the commonest tree on the Chagoopa Plateau.

Juniperus occidentalis Hook. Western Juniper.

Large beautiful specimens of Western Juniper grew in our Mineral King camp. A few specimens were seen on the rocky walls of the Big Arroyo below the Chagoopa Plateau.

## FLOWERING PLANTS

Sparganium angustifolium Michx.

Thriving with the polywogs and frogs in shallow parts of the men's bathtub (17660) and in other lakes and ponds in Little Five Lakes Basin.

Potamogeton sp.

No specimen was collected of the broad-leaved pondweed which was so conspicuous and attractive a feature of the shallow parts of Moraine Lake just off commissary. I insert the name here to let the world know what to look for besides scenery at Moraine Lake, and also for the convenience of Ethel Rose Taylor, who may have difficulty remembering the proper name for Moraine Lake's rippling leaves to which she took such a fancy.

Triglochin palustris L.

Here is a plant with nearly world-wide distribution and yet it almost misses California. Until I found it at Mineral King (17132), it was known in California apparently only from the Rock Creek Lake Basin in Inyo County where Frank Peirson found it in 1934. At Mineral King it grew in a peculiar hillside spring that seeped from the canyon side below the limestone outcrop east of where we camped.

Agropyron pauciflorum (Schwein.) Hitchc.

Mineral King (17237); between Big Arroyo and Chagoopa Plateau (17715).

Agrostis hiemalis (Walt.) B. S. P.

Mineral King (17230); Sky Parlor Meadow (17510).

Agrostis idahoensis Nash.

Mineral King (17220); Sky Parlor Meadow (17517).

Agrostis Thurberiana Hitchc. (Det. A. Beetle)

Between Big Arroyo and Chagoopa Plateau (17674).

Bromus marginatus Nees.

Mineral King (17203); between Big Arroyo and Chagoopa Plateau (17672, 17678).

Bromus Orcuttianus Vasey var. Hallii Hitchc.

Between Big Arroyo and Chagoopa Plateau (17675).

Bromus Suksdorfii Vasey.

Between Big Arroyo and Chagoopa Plateau (17694).

Calamagrostis Breweri Thurb.

Little Five Lakes (17379); Sky Parlor Meadow (17520).

Calamagrostis canadensis (Michx.) Beauv.

Mt. Kaweah (17454); between Little Five Lakes and Kaweah Gap (17601).

Calamagrostis purpurascens R. Br.

Mt. Kaweah (17472); Kaweah Gap (17630).

Danthonia intermedia Vasey.

Big Arroyo at 10,000 ft. (17758).

Danthonia unispicata Munro.

Between Big Arroyo and Chagoopa Plateau (17701).

Deschampsia caespitosa (L.) Beauv.

Mineral King (17228).

Deschampsia elongata (Hook.) Munro.

Mineral King (17219); Sky Parlor Meadow (17518).

Elymus glaucus Buckl.
Mineral King (17072).
Festuca brachyphylla Schult.
Little Five Lakes (17399); Mt. Kaweah (17471).
Glyceria pauciflora Presl.
Sky Parlor Meadow (17519).
Hordeum nodosum L.
Mineral King (17238).
Koeleria cristata (L.) Pers.
Mineral King (17241); Little Five Lakes (17361); Sky Parlor Meadow (17515).
Melica bulbosa Geyer.
Mineral King (17088); between Little Five Lakes and Kaweah Gap (17618).
Melica stricta Bolander.
Mineral King (17138); between Big Arroyo and Chagoopa Plateau (17716).
Muhlenbergia filiformis (Thurb.) Rydb.
Sky Parlor Meadow (17509).
Muhlenbergia Richardsonis (Trin.) Rydb. (Det. A. Beetle.)
Mineral King (17236); Mt. Kaweah (17477); between Big Arroyo and Chagoopa Plateau (17668).
Oryzopsis Kingii (Bolander) Beal.
Little Five Lakes (17378).
Phleum alpinum L.
Mineral King (17231); Chagoopa Plateau (17746).
For the determination of my collection of Poa I am grateful to Dr. Alan Beetle and Dr. G. L. Stebbins, Jr.
Poa Bolanderi Vasey.
Eagle Lake Trail (17155); Sky Parlor Meadow (17516).
Poa epilis Scribn.
Little Five Lakes (17381, 17414, 17588); Mt. Kaweah (17470); Kaweah Gap (17622); Columbine Lake (17810, 17812, 17813).
Poa gracillima Vasey.
Eagle Lake Trail (17189); Little Five Lakes (17412, 17413); between Big Arroyo and Chagoopa Plateau (17719); Columbine Lake (17811).
Poa juncifolia Scribn.
Sky Parlor Meadow (17525).
Poa nervosa (Hook.) Vasey.
Little Five Lakes (17411).
Poa Pringlei Scribn.
Little Five Lakes (17587).
Poa secunda Presl.
Between Big Arroyo and Chagoopa Plateau (17718); Columbine Lake (17809).
Poa Suksdorfii Vasey.
Mt. Kaweah (17488).
Sitanion Hansenii (Scribn.) J. G. Smith.
Mineral King (17112).
Sitanion Hystrix (Nutt.) J. G. Smith.
Mineral King (17223); Mt. Kaweah (17473, 17476). The last number represents the pubescent form named S. cinereum J. G. Smith.
Stipa columbiana Macoun.
Between Big Arroyo and Chagoopa Plateau (17699).
Stipa Elmeri Piper & Brodie.
Mineral King (17239); Sky Parlor Meadow (17533).
Stipa Lettermanii Vasey.
Mineral King (17113); Columbine Lake (17804).
Stipa occidentalis Thurb.
Mt. Kaweah (17469); between Moraine Lake and Sky Parlor Meadow (17499).

Trisetum projectum Louis-Marie. (Det. A. Beetle.)
Mineral King (17232); Mt. Kaweah (17464); between Big Arroyo and Chagoopa Plateau (17670).
Trisetum spicatum (L.) Richt. (Det. A. Beetle.)
Little Five Lakes (17356, 17376); Mt. Kaweah (17463).
Carex abrupta Mkze.
Mineral King (17244); between Big Arroyo and Chagoopa Plateau (17671); Kaweah Meadows (17737).
Carex athrostachya Olney.
Mineral King (17147); Sky Parlor Meadow (17556).
Carex aurea Nutt.
Mineral King (17150).
Carex brevipes W. Boott.
Between Timber Gap and Cliff Creek (17294); Little Five Lakes (17380); Sky Parlor Meadow (17558); between Little Five Lakes and Kaweah Gap (17604).
Carex Breweri Boott.
Mt. Kaweah (17468); Columbine Lake (17795).
Carex capitata L.
Sky Parlor Meadow (17547); Kaweah Meadows (17724).
Carex Congdonii Bailey.
Between Pinto Lake and Black Rock Pass (17334); Mt. Kaweah (17440); between Kaweah Gap and Precipice Lake (17642); Columbine Lake (17794).
Carex exserta Mkze.
Little Five Lakes (17393); Chagoopa Plateau (17566).
Carex festivella Mkze.
Between Kaweah Gap and Precipice Lake (17637).
Carex filifolia Nutt.
Between Pinto Lake and Black Rock Pass (17341).
Carex fissuricola Mkze.
Mineral King (17229); Little Five Lakes (17372); Sky Parlor Meadow (17553); between Sawtooth Pass and Mineral King (17818).
Carex gymnoclada Holm.
Sky Parlor Meadow (17552); Kaweah Meadows (17732).
Carex Helleri Mkze.
Black Rock Pass (17353); Mt. Kaweah (17483); Little Five Lakes (17580).
Carex heteroneura W. Boott.
Eagle Lake Trail (17154); Mineral King (17206); Sky Parlor Meadow (17548); Kaweah Meadows (17736).
Carex Hoodii Boott.
Mineral King (17255); Chagoopa Plateau (17500).
Carex illota Bailey.
Little Five Lakes (17388); between Little Five Lakes and Kaweah Gap (17610); Kaweah Meadows (17730).
Carex inflata Huds.
Sky Parlor Meadow (17549). Here, just off the press (Rhodora 44:324-331), is what Fernald says we must call the plants heretofore known as C. rostrata Stokes, and since what he says sounds good to me, I present this new old name for the edification of Base Campers! Although the typical form of the species is one of the rarer sedges in North America according to Fernald, we were lucky enough to collect it in Sky Parlor Meadow, El Dorado of Carices
Carex inflata Huds. var. utriculata (Boott) Druce.
Mineral King (17213). This is the common form of C. inflata in North Americ
Carex integra Mkze.
Mineral King (17214); Sky Parlor Meadow (17551); Kaweah Meadows (17721).
Carex Jonesii Bailey.
Mineral King (17209); Kaweah Meadows (17731).
Carex Kelloggii W. Boott.
Mineral King (17207).

Carex lanuginosa Michx.
Mineral King (17089, 17143); Sky Parlor Meadow (17560).
Carex mariposana Bailey.
Between Big Arroyo and Chagoopa Plateau (17700).
Carex multicostata Mkze.
Eagle Lake Trail (17177); Mineral King (17257); Sky Parlor Meadow (17544, 17546); Chagoopa Plateau (17563).
Carex nigricans Wahl.
Little Five Lakes (17387).
Carex ormantha (Fern.) Mkze.
Kaweah Meadows (17728).
Carex paucicostata Mkze.
Moraine Lake (17561).
Carex phaeocephala Piper.
Little Five Lake Basin (17596, approaching C. straminiformis); Columbine Lake (17815A, integrading with "C. praticola" but inflorescence upright and stiffish).
Carex praticola Rydb.
Black Rock Pass (17354); Little Five Lakes (17403); Mt. Kaweah (17475, intergrading with "C. phaeocephala" but inflorescence most flexuous); Columbine Lake (17814).
Carex praeceptorium Mkze.
Little Five Lakes (17661).
Carex Preslii Steud.
Sky Parlor Meadow (17545); Hamilton Lakes (17655). These specimens are determined not so much by Mackenzie's treatment as by comparison with specimens determined by Mr. Stacey.
Carex Raynoldsii Dewey.
Eagle Lake Trail (17171).
Carex Rossii Boott.
Eagle Lake Trail (17174); Little Five Lakes (17416); Mt. Kaweah (17451); Sky Parlor Meadow (17559).
Carex simulata Mkze.
Sky Parlor Meadow (17555).
Carex specifica Bailey.
Chagoopa Plateau (17565). The perigynia are a little smaller than in typical specimens.
Carex spectabilis Dewey.
Between Little Five Lakes and Kaweah Gap (17614); Kaweah Meadows (17736A); Farewell Gap (17838).
Carex straminiformis Bailey.
Black Rock Pass (17355); Little Five Lakes (17591); Mt. Kaweah (17447); between Little Five Lakes and Kaweah Gap (17612); between Kaweah Gap and Precipice Lake (17641); Hamilton Lakes (17654); Columbine Lake (17815). I really didn't want so many collections of this usually well-marked species, but failing to recognize in the field the species at different stages of its growth, I collected it over and over and now I am loath to discard any!
Carex subnigricans Stacey.
Little Five Lakes (17426, 17767); Sky Parlor Meadow (17550).
Carex subfusca W. Boott.
Lost Canyon (17788).
Carex teneraeformis Mkze.
Eagle Lake Trail (17193); Mineral King (17210); between Timber Gap and Cliff Creek (17295); Sky Parlor Meadow (17554).
Carex vernacula Bailey.
Little Five Lakes (17584); Columbine Lake (17798).
Carex vesicaria L.
Sky Parlor Meadow (17557); Moraine Lake (17562). In Sky Parlor, where

C. vesicaria and C. inflata grew near each other, the plants were referred to their respective species without that hesitation that occasionally delays me when working on dried specimens in the herbarium.

Carex Whitneyi Olney.
Chagoopa Plateau (17564).

Eleocharis acicularis (L.) R. & S.
Chagoopa Plateau (17745).

Eleocharis bella (Piper) Svenson.
Sky Parlor Meadow (17541).

Eleocharis palustris (L.) R. & S.
Mineral King (17243); Chagoopa Plateau (17494); Little Five Lakes (17761).

Eleocharis pauciflora (Lightf.) Link.
Eagle Lake Trail (17163); Sky Parlor Meadow (17528).

Eriophorum criniger (Gray) Beetle.
Mineral King (17194); Little Five Lakes (17406); Kaweah Meadows.

Scirpus Clementis M. E. Jones.
Little Five Lakes (17383); Kaweah Meadows (17729). Two of the commonest and most characteristic sedges in subalpine Sierran meadows are Carex subnigricans and the present species, and yet until recently they have been rare or unknown in collections.

Scirpus Congdonii Britt.
Mineral King (17215).

Juncus bufonius L.
Mineral King (17205).

Juncus Drummondii Meyer.
Little Five Lakes (17371); Chagoopa Plateau (17723).

Juncus Mertensianus Bong.
Mineral King (17216).

Juncus nevadensis Wats.
Mineral King (17136); Eagle Lake Trail (17178); Sky Parlor Meadow (17526, 17529); Little Five Lakes (17385).

Juncus orthophyllus Cov.
Mineral King (17225); Sky Parlor Meadow (17527).

Juncus Parryi Engelm.
Eagle Lake Trail (17175); between Pinto Lake and Black Rock Pass (17343); Little Five Lakes (17377); Mt. Kaweah (17450).

Juncus spp.
Four collections of diminutive rushes were made as follows: Cliff Creek (17328); between Pinto Lake and Black Rock Pass (17336); Sky Parlor Meadow (17522); Chagoopa Plateau (17571). According to Dr. F. J. Hermann the material represents three unpublished species, so we cannot use his manuscript names yet; but aren't we gratified that all of them aren't the same thing although they looked superficially alike!

Luzula congesta (Thuill.) Lejeune.
Little Five Lakes (17382); Sky Parlor Meadow (17530).

Luzula divaricata Wats.
Little Five Lakes (17358); Mt. Kaweah (17446).

Luzula multiflora (Ehrh.) Lejeune.
Mineral King (17258); Sky Parlor Meadow (17531); between Chagoopa Plateau and Big Arroyo (17575).

Luzula parviflora (Ehrh.) Desv.
Chagoopa Plateau (17495).

Luzula spicata (L.) DC.
Little Five Lakes (17419).

Luzula subcongesta (Wats.) Jeps.
Between Little Five Lakes and Kaweah Gap (17600).

Allium Austinae M. E. Jones.
Mineral King (17128).

Allium parvum Kell.
Little Five Lakes (17593); Columbine Lake (17801). So inconspicuous is this small pale-flowered onion as it grows in granitic sands that it not infrequently makes its presence known to a person through his sense of smell rather than through his sense of sight.
Allium validum Wats. Swamp Onion.
Between Big Arroyo and Chagoopa Plateau (17667). This is the common purplish-rose onion of stream banks and meadows. It is edible.
Brodiaea elegans Hoover.
Cliff Creek (17327). This is one of the plants commonly called Harvest Brodiaea, but in its subalpine home among granite crags just below Pinto Lake, the common name is not at all appropriate--unless a hundred Sierrans, gathering stores and reserves of mountain beauty, can be called harvesters of sorts in fields unexcelled in all the world for up-lifting and soul-satisfying produce!
Brodiaea scabra (Greene) Baker.
Between Timber Gap and Cliff Creek (17296). Commonly known as Golden Brodiaea, this particular form is better-regarded a variety of the more common and widespread B. ixioides.
Calochortus Leichtlinii Hook. f.
Mineral King (17081).
Fritillaria pinetorum Dav. Mountain Fritillary.
Fritillaries were not common in the region visited by Base Campers in 1942 but they were widespread both over the area and in altitudinal range. Fruiting specimens were obtained at Mineral King at about 8,000 ft. (17110) and Paul and Maxine Chenoweth found plants in flower above timberline in Nine Lakes Basin at about 11,000 ft. On the route from Columbine Lake to Sawtooth Pass at an elevation of over 11,000 ft. Hans Leschke and I also found flowers (17808).
Lilium fresnense (Eastw.) Eastw.
The graceful fragrant lilies in flowery gardens which we all admired. Collected from the hanging gardens along the trail between Big Arroyo and Chagoopa Plateau (17697).
Narthecium californicum Baker.
A sight to thrill the heart of a botanist was the garden of Narthecium flanking a boisterous cataract in Cliff Creek Canyon just below Pinto Lake (17307)! And the thrill hasn't worn off yet, because apparently this is the first time this species has been found south of Fresno County.
Smilacina amplexicaulis Nutt. var. glabra Macbr.
Mineral King (17065).
Smilacina stellata (L.) Desf.
Mineral King (17235).
Tofieldia occidentalis Wats.
Mineral King (17134); Kaweah Meadows (17735).
Veratrum californicum Dur. Corn Lily.
Little Five Lakes (17768). The plant with which Suzanne Allen won the prize at the formal tea.
Zigadenus venenosus Wats.
Mineral King (17233).
Sisymbrium idahoense Bick. Mountain Blue-eyed Grass.
Mineral King (17146), growing along the small stream utilized by the men for washing.
Corallorrhiza maculata Raf. Spotted Coral-root.
Eagle Lake Trail (17192).
Habenaria leucostachys (Lindl.) Wats.
The fragrant, pure white spikes of this orchid are a familiar sight in moist meadows throughout the Sierra, as they were at Little Five Lakes (17765).

Habenaria unalaschensis (Spreng.) Wats.
The green-flowered spikes of this orchid are not common in dry coniferous woods. It was collected between Mineral King and Timber Gap (17281) and in Cliff Creek Canyon (17304).
Spiranthes Romanzoffiana C. & S. Lady's Tresses.
Sky Parlor Meadow (17508). A small and not especially attractive orchid named in honor of Count Romanzoff who sponsored an early-day round-the-world Russian expedition. It was during the visit of this expedition to California in 1816 that the California Poppy was discovered in San Francisco.
Populus tremuloides Michx. Quaking Aspen.
The Quaking Aspen was listed among the trees at Mineral King but no specimen was collected. It grew below the village toward Cold Spring Camp Ground but was not common.
Populus trichocarpa T. & G. Black Cottonwood.
The Black Cottonwood reaches its uppermost limit in the lower part of the Canadian Zone at Mineral King. No specimen collected.
Salix Eastwoodiae Ckll.
Mineral King (17222).
Salix lasiandra Benth.
Cliff Creek at about 7,500 ft. (17322).
Salix lasiolepis Benth.
Sterile shoots from shrubs between Mineral King and Cold Spring Camp Ground seem referable to this willow which is a common species at lower elevations (17249).
Salix Lemmonii Bebb.
Mineral King (17149); between Big Arroyo and Chagoopa Plateau (17685).
Salix orestera Schn.
With leaves sometimes green, sometimes gray, sometimes large, sometimes small, sometimes narrow, sometimes wide, this common Mountain Willow had the botanist so baffled that it was collected practically everywhere: Eagle Lake Trail (17164); Little Five Lakes (17368, 17763); between Little Five Lakes and Kaweah Gap (17606, 17607); Kaweah Meadows (17741).
Salix petrophila Rydb. var. caespitosa (Kenn.) Schn.
Little Five Lakes (17421). The discovery of this Dwarf Willow at Long Lake on the Wild Flower Walk made the floral part of Maxine Chenoweth's outing 50% successful. According to latest information the other 50% (Steer's Head, Dicentra uniflora) did not materialize--only leaves were found. Charles Townsend also found the Dwarf Willow at Big Five Lakes. It would seem that this intriguing plant has never been found so far south before.
Salix pseudocordata (Ands.) Rydb.
Between Little Five Lakes and Kaweah Gap (17608). This plant has been named by comparing it with one identified by Dr. C. R. Ball that I collected on the Harrison Pass Trail (cf. Base Camp Botany, 1940). Our plant is probably the same as the one called S. commutata var. rubicunda Jepson, the type of which came from the "Sawtooth Range".
Salix Scouleriana Barr.
Mineral King (17093); Cliff Creek (17318); between Big Arroyo and Chagoopa Plateau (17673).
Salix subcoerulea Piper.
Mineral King (17091).
Corylus californica (A. DC.) Rose, California Hazel.
Near Pinto Lake, Cliff Creek Canyon, el. ca. 8,000 ft. (17309). I wonder if anyone ever before found Hazel growing so high. Helen Rose will tell you that I forgot I was weary when I spied the distinctive fruits of this plant in so unusual a place.
Castanopsis sempervirens (Kell.) Dudley. Sierra Chinquapin.
Mineral King (17086); between Big Arroyo and Chagoopa Plateau (17711).

Quercus Kelloggii Newb. California Black Oak.
Cliff Creek at about 7,500 ft. (17320). The oak was shrubby at this high elevation.
Comandra pallida A.DC. Pale Toad-flax.
Mineral King (17196).
Eriogonum incanum T. & G.
Between Timber Gap and Cliff Creek (17291); Mt. Kaweah (17448); Kaweah Gap (17627); Farewell Gap (17857). The yellow flowers of this buckwheat together with the pearly white flowers of the Sandwort (Arenaria) combined to produce a rock-garden the beauty of which was especially remarked by Kasson Avery and the rest of us on the wild flower walk to Long Lake. Do you remember it?
Eriogonum nudum Dougl. var. deductum (Greene) Jeps.
Mineral King (17079); between Mineral King and Timber Gap (17275); Little Five Lakes (17402, varying to var. scapigerum).
Eriogonum nudum Dougl. var. scapigerum (Eastw.) Jeps.
Between Kaweah Gap and Precipice Lake (17640); Lost Canyon (17793).
Eriogonum ovalifolium Nutt. var. nivale (Canby) M. E. Jones.
Mt. Kaweah (17465); Columbine Lake (17799). Those who were so engrossed by the awesome spectacle of Columbine Lake that they did not perceive the delicate and jewel-like beauty of this most entrancing alpine missed out on an esthetic adventure par excellence.
Eriogonum spergulinum Gray.
Mineral King (17145); Chagoopa Plateau (17502). One of the lovliest wild flower displays seen on the whole trip was on the rocky canyon bottom near commissary at Mineral King where Gypsophila-like masses of this delicate eriogonum produced a white lacy ground-cover beneath the golden daisies of the Wheeler Tarweed. Not so spectacular as the lupine gardens of Cliff Creek or the paint-brushes at Kaweah Gap, but equally lovely and unforgetable.
Eriogonum umbellatum Torr. subsp. polyanthum (Benth.) Stokes. Sulphur Flower.
Mineral King (17144). Common on the rocky flats near commissary. Most of us slept on buckwheats and rocks those first nights and last, remember?
Eriogonum Wrightii Torr. var. subscaposum Wats.
Cliff Creek (17313); Chagoopa Plateau (17501). At both these localities, two forms grew together, one with tomentulous peduncles, the other with perfectly glabrous peduncles. Otherwise the plants appeared exactly alike. The glabrous type has received the names E. curvatum Small and E. junceum Greene. Charles Townsend found an especially attractive alpine form of this plant with pink flowers near White Chief Mine near Mineral King.
Eriogonum sp.
Chagoopa Plateau (17496). I was hungry and tired after the Kaweah climb, but this stunning eriogonum was one plant I couldn't pass up as I hurried down the Chagoopa Plateau toward Moraine Lake and supper. Alan MacRae, who was with me, indicated perplexity that so lowly an herb should stop me; but had the plant been an Egyptian hieroglyph or Mesopotamian tablet, I can be certain he too would have stopped and might even be sought there still!--The plant is related to E. marifolium T. & G. and according to Miss Stokes may be E. Covillei Small.
Oxyria digyna (L.) Hill. Alpine Sorrel.
Little Five Lakes (17581); Farewell Gap (17849). This was one of several plants that indicated a narrow arctic-alpine belt along the rocky escarpment southeast of men's camp where snows pile deep in the winter and lie late in the summer.
Polygonum bistortoides Pursh.
Sky Parlor Meadow (17535).
Polygonum Douglasii Greene. (Det. J. F. Brenckle.)
Mineral King (17212); Lost Canyon (17775).
Polygonum Kelloggii Greene.
Lost Canyon (17774); Kaweah Meadows.

Polygonum minimum Wats.
Cliff Creek (17331); Lost Canyon (17773). These collections are apparently from farther south than any others (cf. Base Camp Botany, 1940).
Polygonum montanum (Small) Greene. (Det. J. F. Brenckle.)
Kaweah Meadows (17722).
Polygonum sawatchense Small. (Det. J. F. Brenckle.)
Big Arroyo (17753); between Mineral King and Farewell Gap (17832). These plants resemble the plants referred to P. Douglasii but the fruits are erect instead of deflexed. In the mountains of Southern California, this sort of plant is named P. Douglasii var. Johnstonii Munz.
Polygonum unifolium Small. (Det. J. F. Brenckle.)
Little Five Lakes (17762).
Rumex Acetosella L. Sheep Sorrel.
A weedy introduction at Mineral King (17058).
Rumex paucifolius Nutt.
Sky Parlor Meadow (17537).
Rumex paucifolius Nutt. var. gracilescens Rech. f.
Little Five Lakes (17359); Chagoopa Plateau (17568).
Rumex utahensis Rech. f.
Sky Parlor Meadow (17540); Mineral King (17827). In an attempt to follow Rechinger's segregation of species related to Rumex salicifolius, I am calling these collections R. utahensis. The plants cannot be R. californicus a plant from the lowlands, the other species in this group without callous grains. The plants may represent a form of R. triangulivalvis, but this should not be if the presence or absence of callous grains has any diagnostic value at all.
Chenopodium Fremontii Wats.
Cliff Creek (17305). Base Camp collections of this species are apparently the only ones that have been reported from the west side of the Sierra Nevada (cf. Base Camp Botany, 1940).
Calyptridium pygmaeum Parish ex Rydb. vel aff.
Base Campers and nature students have probably noticed my "weakness" for tiny plants--whereas stately lily or gorgeous paint-brush will get only cursory notice in passing, some tiny mite scarcely visible to superficial observation will touch off such a flood of enthusiasm that auditors and spectators may wonder if all's right with the world. These floral dwarfs are my Lilliputians. I'm their Gulliver! In them is all the perfection of form and utility of structure of a sequoia; the force that unfurls the oak contrives a floral microcosm. The wonder of things so small and perfect "gets" me!--The pygmy Calyptridium was such a plant, scarcely an inch tall, and the enthusiasm with which its discovery was heralded was inversely proportional to its size! To Oliver and the Mt. Kaweah party, the botanist was probably put down (mentally, of course) as a queer "species," and maybe they are/were right. But the tiny Calyptridium which was found at the cabin in the Big Arroyo at 9,900 feet (17427), has now come into its own botanically. In all the world it has been reported only from Big Bear in the San Bernardino Mts. before this and only once from there!
Lewisia nevadensis (Gray) Rob.
Little Five Lakes (17589); between Little Five Lakes and Kaweah Gap (17605).
Lewisia pygmaea (Gray) Rob.
Ned Graves collected a beautiful plant of this alpine species near Big Five Lakes and I collected specimens at Columbine Lake (17805).
Lewisia triphylla (Wats.) Rob.
Between Little Five Lakes and Kaweah Gap (17616).
Montia Chamissoi (Ledeb.) D. & J.
Kaweah Meadows (17744A).
Spraguea umbellata Torr. var. caudicifera Gray. Alpine Pussy Paws.
Mt. Kaweah (17441); Kaweah Gap (17645). These are Pussy Paws perennial in

duration and reduced in size by alpine conditions.

Arenaria congesta Nutt.
Mineral King (17077).

Arenaria congesta Nutt. var. suffrutescens Rob.
Little Five Lakes (17364).

Arenaria Nuttallii Pax var. gracilis Rob.
Little Five Lakes (17366); Kaweah Gap (17623); Columbine Lake (17797). In the carpet of cloth-of-gold and old lace that was laid as a rock garden over morainal debris near Long Lake, Arenaria Nuttallii was the lace to the gold of Eriogonum incanum.

Sagina saginoides (L.) Britt. var. hesperia Fern.
Mineral King (17121).

Silene bernardina Wats.
Between Pinto Lake and Black Rock Pass (17342); Chagoopa Plateau (17497).

Silene Lemmonii Wats.
Mineral King (17054).

Silene montana Wats.
Between Pinto Lake and Black Rock Pass (17342A).

Silene Watsonii Rob.
Little Five Lakes (17401); Mt. Kaweah (17480).

Stellaria borealis Bigel.
Eagle Lake Trail (17169).

Stellaria longipes Goldie.
Mineral King (17208).

Actaea arguta Nutt. Baneberry.
At the log-jam at the outlet of the lowest of the Big Five Lakes on our way to Lost Canyon, I hesitated long enough to collect a specimen of Baneberry (17770).

Aquilegia formosa Fisch. Red Columbine.
Mineral King (17105). The stems, inflorescence, and fruits are very glandular.

Aquilegia pubescens Cov. Sierra Columbine.
The beautiful High Sierran columbine was common and widespread throughout our region. Mt. Kaweah (17466); Sawtooth Pass (17817); Farewell Gap (17850).

Caltha biflora DC. Marsh-marigold.
Between Timber Gap and Cliff Creek (17293).

Delphinium luporum Greene.
Between Kaweah Gap and Precipice Lake (17635); Kaweah Meadows (17737).

Delphinium patens Benth.
Between Mineral King and Timber Gap (17264). This glandular form from the southern Sierra Nevada has been named D. Greenei Eastw.

Ranunculus alismaefolius Geyer var. alismellus Gray.
Little Five Lakes (17585).

Ranunculus Eschscholtzii Schlect.
Little Five Lakes (17590); Farewell Gap (17841).

Thalictrum Fendleri Engelm.
Mineral King (17082).

Thalictrum sparsiflorum Turcz.
Sky Parlor Meadow (17513).

Dicentra nevadensis Eastw. Sierran Bleeding-heart.
The discovery of this exquisite diminutive Bleeding-heart at the first of the Hamilton Lakes below Precipice Lake was one of the botanical highlights of the Base Camp. If only all the Base Campers could have seen that stunning fringe of Dicentra along the trail---oh! (17647).

Anelsonia eurycarpa (Gray) Macbr. & Pays.
Another A-1 botanical find, this time at over 13,000 ft. on Mt. Kaweah (17493). Maybe it was the discovery of this petite Draba-like crucifer that

put wings on my feet and carried me with such spirit and ease up the last steep pitch to the summit ridge of the mountain. At any rate, there are not many crucifers in California I would have preferred to meet! Here's hoping you aren't disappointed when you find Anelsonia---just don't expect anything quite so spectacular as Sky Pilot!

Arabis Davidsonii Greene.
I would have been quite content with the single specimen I so vociferously discovered at Long Lake on the Botany Walk (17422), but this rather rare plant was another of the fine things found at the first of the Hamilton Lakes below Precipice Lake (17653). I was busier than a half dozen conies hoarding hay in summer at Hamilton Lakes, alt. ca. 10,000 ft.

Arabis divaricarpa Nels.
Mineral King (17107); Eagle Lake Trail (17157); Little Five Lakes (17759).

Arabis Drummondii Gray.
Mineral King (17152).

Arabis inyoensis Rollins.
Kaweah Gap (17628).

Arabis Lemmonii Wats.
Mineral King (17140); Black Rock Pass (17351); Mt. Kaweah (17486); Farewell Gap (17855; topotype of A. polyclada Greene).

Arabis Lemmonii Wats. var. depauperata (Nels. & Kenn.) Rollins.
Black Rock Pass (17349); Kaweah Gap (17629).

Arabis platysperma Gray.
Mineral King (17059).

Arabis platysperma Gray var. Howellii (Wats.) Jeps.
Little Five Lakes (17396); Mt. Kaweah (17456).

Arabis repanda Wats.
Mineral King (17102); between Big Arroyo and Chagoopa Plateau (17688).

Arabis retrofracta Grah.
Mineral King (17106); Chagoopa Plateau (17506).

Barbarea orthoceras Ledeb.
Mineral King (17119); Farewell Gap (17839).

Cardamine Breweri Wats.
Mineral King (17070).

Dentaria corymbosa Jeps. var. grata Jeps.
A topotype of this rare plant from the Deer Creek Trail between Timber Gap and Cliff Creek wasn't properly appreciated until I got home and tried to identify it (17292).

Descurainia Richardsonii (Sweet) O. E. Schulz. subsp. incisa (Engelm.) Detling.
Between Big Arroyo and Chagoopa Plateau (17679).

Descurainia Richardsonii (Sweet) O. E. Schulz. subsp. viscosa (Rydb.) Detling.
Mineral King (17052).

Draba Breweri Wats.
Black Rock Pass (17352); Mt. Kaweah.

Draba cruciata Pays.
Eagle Lake Trail (17156); Timber Gap (17282). A common enough plant around Mineral King, but apparently found nowhere else in typical form.

Draba Lemmonii Wats.
Little Five Lakes (17582); Columbine Lake (17800).

Draba stenoloba Ledeb. var. nana (O. E. Schulz) C. L. Hitchc.
Eagle Lake Trail (17181); Hamilton Lakes (17658); Farewell Gap (17840).

Erysimum asperum (Nutt.) DC. var. perenne Wats.
Farewell Gap, the type locality (17848); Little Five Lakes (17405); Mt. Kaweah (17474). This Sierran Wallflower is not so nearly related to the Great Plains species, E. asperum, as to the widespread Californian species but the proper name showing this relationship has not yet been published.

Erysimum nevadense Heller.
Eagle Lake Trail (17158). This too is a part of, and probably not

specifically distinct from, the Californian complex to which reference is made above.

Radicula sinuata (Nutt.) Greene.
Chagoopa Plateau (17747). This diminutive mustard is the same as the plants called R. curvisiliqua in former Base Camp botanies.

Streptanthus tortuosus Kell. var. flavescens Jeps.
Eagle Lake Trail (17176); Farewell Gap (17843).

Streptanthus tortuosus Kell. var. optatus Jeps.
Between Pinto Lake and Black Rock Pass (17332).

Streptanthus tortuosus Kell. var. orbiculatus (Greene) Hall.
Little Five Lakes (17418); Hamilton Lakes (17652).

Rhodiola rosea L. var. integrifolia (Raf.) Jeps. Western Roseroot.
Hamilton Lakes (17646). Not uncommon around Little Five Lakes and elsewhere at high elevations.

Sedum obtusatum Gray.
Plants in bud seen but not collected between Little Five Lakes and Kaweah Gap.

Sedum stenopetalum Pursh.
Between Chagoopa Plateau and Big Arroyo (17574); between Kaweah Gap and Precipice Lake (17638). Charles Townsend brought me plants from Big Five Lakes. These collections have been made farther south apparently than any heretofore reported.

Heuchera rubescens Torr. var. pachypoda R. B. & L.
Eagle Lake Trail (17165).

Heuchera rubescens Torr. var. Rydbergiana R. B. & L.
Between Big Arroyo and Chagoopa Plateau (17676).

Jamesia americana T. & G. var. californica (Small) Jeps.
Mt. Kaweah (17453); Columbine Lake (17807). This very attractive alpine shrub was also collected at White Chief Mine near Mineral King by Charles Townsend.

Lithophragma scabrella (Greene) Greene.
Between Mineral King and Timber Gap (17274).

Mitella Breweri Gray.
Brewer's Mitrewort was seen near Little Five Lakes but was not collected.

Parnassia californica (Gray) Greene.
The Grass-of-Parnassus that I collected in Kaweah Meadows (17734) was still in bud but Margaret Byrkit said that in Cliff Creek Canyon on the way out the plants were in full bloom.

Ribes cereum Dougl.
Mineral King (17060); Mt. Kaweah (17479).

Ribes inerme Rydb.
Mineral King (17122).

Ribes lasianthum Greene.
Mineral King (17055); Cliff Creek (17319); between Big Arroyo and Chagoopa Plateau (17714).

Ribes montigenum McClatchie.
Mineral King (17131); Little Five Lakes (17420).

Ribes nevadense Kell.
Cliff Creek (17302).

Ribes Roezlii Regel.
Between Timber Gap and Cliff Creek (17298).

Ribes viscosissimum Pursh.
Eagle Lake Trail (17166).

Saxifraga aprica Greene.
Little Five Lakes (17365). While Hans Leschke and I were collecting this tiny little saxifrage as it bloomed on flats recently deserted by snowbanks, I tried to explain to Dorothy Huggins what would eventually happen to the specimens, the scientific immortality in store for them!

Saxifraga bryophora Gray.
Little Five Lakes (17357).
Saxifraga montana (Small) Fedde.
Eagle Lake Trail (17173); between Big Arroyo and Chagoopa Plateau (17719A); Kaweah Meadows (17726).
Saxifraga nidifica Greene.
Little Five Lakes (17408); Columbine Lake (17806).
Saxifraga oregana Howell.
Collected by Hans Leschke in one of the lush meadows near the north end of the Chagoopa Plateau.
Saxifraga punctata L. var. arguta (Don) Engl. & Irm.
Eagle Lake Trail (17172).
Saxifraga Tolmiei T. & G.
Sawtooth Pass (17816). Between scree and altitude, most Base Campers traversing Sawtooth Pass were not so speedy that they didn't see this attractive saxifrage forming fetching fringes in the protection of rocks.
Amelanchier siskiyouensis C. K. Schn.
Cliff Creek (17317).
Fragaria virginiana Duch. var. sibbaldifolia (Rydb.) Jeps.
Kaweah Meadows (17739).
Geum macrophyllum Willd.
Mineral King (17195).
Holodiscus microphyllus Rydb.
Mineral King (17056); Mt. Kaweah (17445).
Ivesia campestris (M. E. Jones) Rydb.
Sky Parlor Meadow (17511); Kaweah Meadows (17733).
Ivesia lycopodioides Gray subsp. megalopetala (Rydb.) Keck.
Sky Parlor Meadow (17539).
Ivesia pygmaea Gray.
Mt. Kaweah (17438); Little Five Lakes (17579); Kaweah Gap (17634); Hamilton Lakes (17657); Lost Canyon (17784). It would appear that I couldn't resist collecting this fetching alpine any time I saw it!
Potentilla Breweri Gray.
Little Five Lakes (17583); between Little Five Lakes and Kaweah Gap (17603).
Potentilla Drummondii Lehm.
Between Big Arroyo and Little Five Lakes (17758A); Lost Canyon (17792); between Sawtooth Pass and Mineral King (17819); Farewell Gap (17845).
Potentilla flabellifolia Hook.
Little Five Lakes (17390).
Potentilla glandulosa Lindl. var. lactea Greene.
Between Big Arroyo and Chagoopa Plateau (17717).
Potentilla gracilis Dougl. subsp. Nuttallii (Lehm.) Keck.
Mineral King (17240); between Big Arroyo and Chagoopa Plateau (17750); Farewell Gap Trail (17829).
Potentilla Sibbaldii Hal.f.
Little Five Lakes (17586); Farewell Gap (17835).
Prunus emarginata (Dougl.) Walp.
Mineral King (17061).
Rubus nutkanus Moc. var. bifarius (Fern.) Fern.
Mineral King (17124).
Sorbus californica Greene. Mountain Ash.
Between Little Five Lakes and Kaweah Gap (17609). Also seen along Cliff Creek.
Spiraea densiflora Nutt.
Between Little Five Lakes and Kaweah Gap (17615).
Astragalus Bolanderi Gray.
Between Timber Gap and Cliff Creek (17290); Farewell Gap (17858).

Lotus crassifolius (Benth.) Greene.
Mineral King (17218).
Lotus Douglasii Greene var. nevadensis (Wats.) Ottley.
Mineral King (17250).
Lotus Torreyi (Gray) Greene.
Mineral King (17261).
For the determination of the large and puzzling collection of lupines, I am grateful to Miss Eastwood.
Lupinus albicaulis Dougl. var.
Mineral King (17262).
Lupinus Andersonii Wats.
Mineral King (17125); Big Arroyo near Little Five Lakes (17755).
Lupinus Covillei Greene.
Hamilton Lakes (17648). This is the lupine that was so beautiful along the trail below Precipice Lake.
Lupinus dasyphyllus Greene.
Farewell Gap. In general appearance this resembles the Coville Lupine but in this the keel is without hairs. (17842).
Lupinus hypolasius Greene.
Between Pinto Lake and Black Rock Pass (17338); Little Five Lakes (17595); Farewell Gap (17851, 17853). This was the beautiful lupine with low spreading stems and shaggy-hairy leaves seen throughout our region.
Lupinus hypolasius Greene var.
Sky Parlor Meadow (17512).
Lupinus hypolasius X dasyphyllus, hybrid.
Farewell Gap (17852). Only a few plants, apparently of hybrid origin, were seen at the summit of the gap.
Lupinus monensis Eastw.
Chagoopa Plateau (17507).
Lupinus Parishii (C. P. Smith) Eastw.
Between Mineral King and Timber Gap (17276); between Sawtooth Pass and Mineral King (17820). These are the plants which were purple throughout, stems, leaves, and flowers, and which attracted so much attention from Base Campers, going and coming.
Lupinus piperitus Davidson.
Near Little Five Lakes (17756). Do you remember the heavenly blue of the swamp lupines along the trail to the Big Arroyo? This was it!
Lupinus piperitus Davidson var.
Between Big Arroyo and Chagoopa Plateau (17698).
Lupinus procerus Greene.
Mineral King (17098). This is the common showy lupine at Mineral King and along the road to Visalia.
Lupinus sp.
Little Five Lakes (17392). A small-flowered blue lupine with small white-shaggy leaflets.
Lupinus sp.
Between Mineral King and Timber Gap (17272). A pale slender-stemmed lupine with blue flowers crowded in short heads.
Trifolium cyathiferum Lindl.
Eagle Lake Trail (17187).
Trifolium microcephalum Pursh.
Mineral King (17254).
Trifolium monanthum Gray.
Eagle Lake Trail (17161). In the flowers of this the banner is creamy white and the keel purplish.
Trifolium monanthum Gray var.
Between Timber Gap and Cliff Creek (17289). This was a striking color-variant in which the banner was purplish and the rest of the corolla white!

Trifolium tenerum Eastw.
Cliff Creek (17308); between Big Arroyo and Chagoopa Plateau (17693).
Trifolium variegatum Nutt. var. pauciflorum (Nutt.) McDerm.
Eagle Lake Trail (17162).
Trifolium Wormskjoldii Lehm.
Mineral King (17221).
Linum Lewisii Pursh.
Mineral King (17142); between Big Arroyo and Chagoopa Plateau (17720A).
Geranium Richardsonii F. & T.
Farewell Gap Trail (17828).
Callitriche autumnalis L.
"It's an ill wind...." If Hans Leschke hadn't taken time to dry himself after sliding into a pond from a slippery log, I wouldn't have had time to obtain this choice and delicate aquatic which was growing submerged in the pond! Little Five Lakes (17766).
Acer glabrum Torr. var. Torreyi (Greene) Smiley.
Mineral King (17053).
Ceanothus cordulatus Kell.
Mineral King (17071); between Big Arroyo and Chagoopa Plateau (17712).
Rhamnus rubra Greene subsp. yosemitana Wolf.
Mineral King (17096); between Sawtooth Pass and Mineral King (17823).
Sidalcea ranunculacea Greene.
Between Mineral King and Timber Gap (17271); between Pinto Lake and Black Rock Pass (17340); Lost Canyon (17790).
Sidalcea reptans Greene.
Sky Parlor Meadow (17514).
Hypericum anagalloides C. & S.
Between Timber Gap and Cliff Creek (17297); Lost Canyon (17791).
Hypericum formosum H.B.K. var. Scouleri (Hook.) Coulter. St. John's Wort.
Hans Leschke found this attractive plant near Timber Gap.
Viola Macloskeyi Lloyd.
Little Five Lakes (17370).
Viola purpurea Kell.
Mineral King (17085); between Pinto Lake and Black Rock Pass (17335); Little Five Lakes (17373); between Kaweah Gap and Precipice Lake (17639).
Viola purpurea Kell. var. pinetorum Greene.
Between Mineral King and Timber Gap (17277).
Epilobium adenocaulon Hausskn.
Mineral King (17151).
Epilobium anagallidifolium Lam.
Farewell Gap (17834). A beautiful patch of this delicate little willow-herb grew near commissary at Little Five Lakes and it is one of my botanical regrets that I neglected to collect a specimen.
Epilobium angustifolium L. var. pygmaeum Jeps.
The specimens from above timberline on Mt. Kaweah (17491) are only 4 in. tall.
Epilobium brevistylum Barbey.
Mineral King (17068).
Epilobium glaberrimum Barbey.
Mineral King (17242A); between Big Arroyo and Chagoopa Plateau (17683).
Epilobium lactiflorum Hausskn.
Mineral King (17153).
Epilobium obcordatum Gray.
Between Kaweah Gap and Precipice Lake (17643); Farewell Gap (17844). If kodachromists nearly lost themselves for joy at the sight of a rock fringe of the Rose Epilobium at Kaweah Gap, what would they have done if they had seen an entire slope glorified at Farewell Gap?

Epilobium oregonense Hausskn.
Eagle Lake Trail (17167).
Epilobium paniculatum Nutt.
Mineral King (17245).
Gayophytum diffusum T. & G.
Mineral King (17075, 17246); Chagoopa Plateau (17504).
Gayophytum humile Juss.
Minutely puberulent plants from Mineral King (17126) seem intermediate between var. typicum Munz and var. hirtellum Munz.
Gayophytum Nuttallii T. & G.
Mineral King (17069); Little Five Lakes (17384); Chagoopa Plateau (17503); between Little Five Lakes and Kaweah Gap (17613); Lost Canyon (17782).
Gayophytum Nuttallii T. & G. var. Abramsii Munz.
Mineral King (17097, 17247).
Gayophytum racemosum T. & G.
Eagle Lake Trail (17180).
Zauschneria latifolia Greene.
I wonder how many Base Campers returning to Mineral King via Sawtooth Pass saw the beautiful red-flowered California Fuchsia. I know Maxine Chenoweth did because she gave me a piece which I added to my specimen (17821).
Angelica lineariloba Gray.
A conspicuous parsley of the Queen Anne's Lace type around Mineral King (17101).
Ataenia Gairdneri H. & A.
Between Big Arroyo and Chagoopa Plateau (17692).
Cymopterus terebinthinus (Hook.) T. & G.
Mineral King (17123); Little Five Lakes (17424).
Heracleum lanatum Michx.
Mineral King (17825).
Ligusticum Grayi C. & R.
Mineral King (17204); Little Five Lakes (17394).
Lomatium Torreyi (C. & R.) C. & R.
Between Kaweah Gap and Precipice Lake (17644).
Oreonana Clementis (M. E. Jones) Jeps.
Mt. Kaweah (17439); Chagoopa Plateau (17567).
When I first found this most delectable little parsley on the ascent of Mt. Kaweah, I was quite beside myself with joy. My suspicions as to its rarity have been substantiated because the tiny plant is found only in the southern Sierra Nevada and is not very abundant. It was originally described from Mt. Whitney.
Osmorrhiza nuda Torr.
Mineral King (17094); Chagoopa Plateau (17505).
Oxypolis occidentalis C. & R.
Mineral King (17259).
Sanicula septentrionalis Greene var. nemoralis (Greene) Jeps.
Mineral King (17080).
Sphenosciadium capitellatum Gray. Button Parsley.
Mineral King (17242).
Cornus stolonifera Michx. Mountain Dogwood.
Mineral King (17103).
Arctostaphylos nevadensis Gray. Mountain Manzanita.
Between Mineral King and Timber Gap (17263).
Arctostaphylos patula Greene. Green Manzanita.
Mineral King (17129); between Big Arroyo and Chagoopa Plateau (17713). On the trail between Mineral King and Timber Gap the two species of manzanita grew together and as I went along I watched for hybrids between them. I did not see any, but a plant that was probably of hybrid origin was seen by Laura Mercado and reported at our Pinto Lake campfire.

Gaultheria humifusa (Grah.) Rydb.
Not uncommon along the strand of Long Lake in the Little Five Lakes Basin where I found both flowers and young fruit (17375). This was one of the outstanding finds of the Base Camp---the plant has been known in California from only three stations heretofore, one of the three being our Base Camp collection at Garnet Lake last summer.
Kalmia polifolia Wang. var. microphylla (Hook.) Rehd.
Little Five Lakes (17592); Kaweah Meadows. This is the little heather with rosy saucer-shaped flowers that everyone admires.
Ledum glandulosum Nutt. Labrador Tea.
Little Five Lakes (17363).
Phyllodoce Breweri (Gray) Hel. Bryanthus.
The Bryanthus was not as common around Little Five Lakes (17578) as it is in the Sierra farther north.
Pyrola asarifolia Michx. var incarnata (DC.) Fern.
This attractive plant was found at Pinto Lake by Laura Mercado.
Pyrola minor L.
Hans Leschke spotted the one and only plant we found at the Kaweah Meadows (17743).
Pyrola secunda L.
Kaweah Meadows (17742). Charles Townsend brought me specimens from Big Five Lakes.
Sarcodes sanguinea Torr. Snow Plant.
Beautiful specimens of this extraordinary plant were seen along the trail between Big Arroyo and Chagoopa Plateau.
Vaccinium caespitosum Michx. Dwarf Bilberry.
Little Five Lakes (17391). All of us on the botany walk to Long Lake admired the delicacy and beauty of the bilberries.
Vaccinium occidentale Gray. Western Blueberry.
Little Five Lakes (17386).
Dodecatheon alpinum Greene. Alpine Shooting-star.
Little Five Lakes (17576).
Dodecatheon Jeffreyi Moore. Jeffrey's Shooting-star.
Little Five Lakes (17577). Shooting-stars are not cyclamens, a genus of Old World plants, particularly evident as potted plants around Christmas. Why then should that beautiful tarn, so fetchingly painted by Leland Curtis, be dubbed "Cyclamen Lake"? Except that there are much more important things on hand to attend to, Washington should hear of this misnomer.
Primula suffrutescens Gray. Sierra Primrose.
Mt. Kaweah (17460); Columbine Lake (17802). Yes, I saw the photogenic cluster of Sierra Primroses just as we reached Columbine Lake, but set your minds at ease, I was too busy thinking about Carex to disturb the colony! My specimens came from a little higher up on our route to Sawtooth Pass.
Gentiana Amarella L. var. acuta (Michx.) Herder.
Mineral King (17860), where we collected it by flashlight the night before we left, knowing we would be leaving so early in the morning!
Gentiana calycosa Griseb.
Farewell Gap (17836); between Big Arroyo and Chagoopa Plateau.
Gentiana holopetala (Gray) Holm.
Sky Parlor Meadow (17532); Kaweah Meadows (17744); Lost Canyon (17786); Mineral King (17830).
Gentiana Newberryi Gray.
Lost Canyon (17787). This is the dwarf gentian with whitish flowers found in high dryish meadows.
Swertia perennis L. var. obtusa Griseb.
Between Big Arroyo and Chagoopa Plateau (17704).

Apocynum pumilum (Gray) Greene. Dogbane.
Mineral King (17067).
Convolvulus chartaceus Jeps.
Mineral King (17120).
Cuscuta californica Choisy var. graciliflora Engelm.
Between Timber Gap and Cliff Creek (17287).
Cuscuta Suksdorfii Yuncker.
Mineral King (17253). To find Suksdorf's Dodder so far south was a real surprise.
Collomia grandiflora Dougl.
Mineral King (17256).
Collomia linearis Nutt.
Mineral King (17201).
Collomia tinctoria Kell.
Mineral King (17137). Apparently this plant has not been reported from the southern Sierra Nevada before this.
Gilia capillaris Kell.
Eagle Lake Trail (17188); Lost Canyon (17778). This is another species heretofore unreported south of Mariposa County.
Gilia gilioides (Benth.) Greene.
Mineral King (17089A).
Leptodactylon pungens (Torr.) Jeps. var. tenuilobum (Parish) Jeps. Granite Gilia
Little Five Lakes (17404); Mt. Kaweah (17482); Hamilton Lakes (17649). The last collection with its lovely clear lilac corollas is different from other Granite Gilias I have seen and might represent Gilia lilacina Brand, except that the calyx doesn't seem just right for that plant.
Linanthus ciliatus (Benth.) Greene.
Mineral King (17217); between Big Arroyo and Chagoopa Plateau (17666).
Linanthus ciliatus (Benth.) Greene var. neglectus (Greene) Jeps.
Lost Canyon (17779). A reduced form of the preceding.
Linanthus Harknessii (Curran) Greene.
Lost Canyon (17780).
Linanthus montanus Greene.
Cliff Creek (17324).
Linanthus oblanceolatus Eastw.
Eagle Lake Trail (17183); Chagoopa Plateau (17570); Lost Canyon (17777). Here is really a rare plant and are we pleased to have three collections of it!
Navarretia divaricata (Torr.) Greene.
Mineral King (17224); Big Arroyo (17754); Lost Canyon (17781).
Phlox diffusa Benth.
Little Five Lakes (17389); Mt. Kaweah (17449). Granite Gilias and Phloxes are sometimes confused but they differ in leaves as well as in flowers. The leaves of the former are alternate, of the latter opposite.
Phlox gracilis (Hook.) Greene.
Lost Canyon (17776). This is the same as the plant reported last year as Gilia gracilis var. nana Brand.
Polemonium eximium Greene. Sky Pilot.
With all the climbing Base Campers did at timberline and above, no Sky Pilots were found until after nearly everyone had left for home. Then Hans Leschke and I found it at Farewell Gap (17856).
Siphonella montana Nutt.
Mineral King (17095). If Bill Hasselbrock's bees like fragrant flowers, they surely would have been in "clover" amongst the Siphonellas which perfumed the air along the trail to Farewell Gap. And what are Siphonellas? Well, that's a new name I have dug up for Leptodactylon or Linanthus or Gilia Nuttallii! Temporarily at least, I'm in favor of the name Siphonella for

an anomalous plant. (Please see page 29.)

Hydrophyllum occidentale Gray.
Mineral King (17083).

Nemophila maculata Benth. Five-spot.
Between Mineral King and Timber Gap at over 9,000 ft.---rather high for this beautiful plant (17273).

Nemophila spathulata Cov.
Eagle Lake Trail (17182); Cliff Creek.

Phacelia californica Cham. var. egena (Greene) Dundas.
Cliff Creek (17323).

Phacelia dasyphylla Greene.
Columbine Lake (17796). A queer plant which is probably closely related to P. heterophylla var. frigida---but the leaves are deeply lobed and the filaments are glabrous.

Phacelia Eisenii Brandg.
Here it is, that colossal phacelia, the sensation of Black Rock Pass, the furor of the first campfire at Little Five Lakes. Marion Jones will tell you with all the gruesome details, how the frail little plants were dragged from the shaded recesses of sheltering rocks and what a thrill swept over the probing botanist and his spectators as the specimen with its 1/8 inch long flowers was exultingly exhibited! For the word colossal, we are grateful to Elsie Bell!---Not only did we find the Eisen Phacelia between Pinto Lake and Black Rock Pass (17345), but we also found it between Big Arroyo and Chagoopa Plateau (17434).

Phacelia heterophylla Pursh var. frigida (Greene) Jeps.
Mt. Kaweah (17484).

Phacelia heterophylla Pursh var.
Mineral King (17139); Little Five Lakes (17398); Kaweah Gap (17625). This rather coarse plant with lavender corollas is the same as the one reported at the 1940 Base Camp.

Phacelia heterophylla Pursh var.
Mineral King (17118). This variant is quite different from the preceding in its stricter habit and smaller whitish corollas.

Phacelia hydrophylloides Torr.
Between Mineral King and Timber Gap (17267).

Phacelia orogenes Brand.
Here it is---the second colossal phacelia of our trip. Originally described from near Mineral King and apparently known from only two collections, I simply had to find the plant or the Base Camp would not have been a success (botanically!). Not only did we find it at several points around Mineral King but as far eastward as the Big Arroyo, and Charles Townsend found it near White Chief Mine. So impressed was Ned Allen with this mighty (important) mite, he burst into song (without music):

"Phacelia, O shy, wee Phacelia!
The grosser flowers try to conceal ya.
But John Thomas Howell
His eye sharp as an owl
To Sierrans did quickly reveal ya."

We made more collections of this heretofore most rare plant than of any other species: Mineral King (17108); Eagle Lake Trail, type locality (17160); near White Chief Mine; between Mineral King and Timber Gap (17280); between Timber Gap and Cliff Creek (17289A); Cliff Creek (17329); between Pinto Lake and Black Rock Pass (17346); between Big Arroyo and Chagoopa Plateau (17435), Lost Canyon (17771).

Phacelia ramosissima Dougl.
Mineral King (17090).

Allocarya hispidula Greene.
Mineral King (17200); Sky Parlor Meadow (17521).
Cryptantha affinis (Gray) Greene.
Eagle Lake Trail (17186).
Cryptantha glomeriflora Greene.
Here we are again with this rare little borage. At other Base Camps we made only a single collection but this year we made two: Big Arroyo (17752); Lost Canyon (17771A).
Cryptantha simulans Greene.
Mineral King (17099).
Hackelia floribunda (Lehm.) Johnston.
Mineral King (17117); between Little Five Lakes and Kaweah Gap (17602). This is the tall small-flowered blue "forget-me-not" of the mountain meadows.
Mertensia ciliata (James) G. Don var. stomatechoides (Kell.) Jeps.
Mineral King (17064). One of the loveliest wildflowers of the mountains that some sentimental naturalists dub "Languid Ladies" when the name Mertensia should be quite satisfactory.
Oreocarya humilis (Gray) Greene.
Between Kaweah Gap and Precipice Lake (17636).
Oreocarya nubigena Greene.
Mt. Kaweah (17489).
Agastache urticifolia (Benth.) Ktze.
Mineral King (17114). Laura Mercado will tell anyone who is interested that this tall mint so common along trails is not pennyroyal (Monardella) which is a broad-based plant usually a foot or less tall.
Monardella odoratissima Benth. subsp. parvifolia (Greene) Epling.
Between Big Arroyo and Chagoopa Plateau (17432); Chagoopa Plateau (17748).
Monardella odoratissima Benth. subsp. pinetorum (Heller) Epling.
Mineral King (17073).
Prunella vulgaris L.
Mineral King (17238A).
Stachys albens Gray.
Mineral King (17260).
Trichostema oblongum Benth.
Two tiny plants of this species were collected in Cliff Creek Canyon just below Pinto Lake.
Solanum Xanti Gray.
Mineral King (17251).
Castilleja adenophora Eastw.
Mineral King (17087); Kaweah Gap (17624); between Big Arroyo and Chagoopa Plateau (17690); Little Five Lakes (17760). The brilliant red paint-brush so prominent in the gorgeous display below Kaweah Gap.
Castilleja Culbertsonii Greene.
Little Five Lakes (17397); Sky Parlor Meadow (17534). The vividly colored little paint-brush with purplish-rose spikes found in subalpine meadows.
Castilleja miniata Dougl.
Eagle Lake Trail (17170); between Big Arroyo and Chagoopa Plateau (17702). This is the tall red paint-brush of wet meadows and springy slopes. Peter Friedricksen found a queer yellow form in Cliff Creek Canyon.
Castilleja nana Eastw.
Timber Gap (17284); Little Five Lakes (17400); Kaweah Gap (17626). A low Paint-brush with greenish and cream spikes growing on gravelly flats near timberline.
Collinsia parviflora Dougl.
Eagle Lake Trail (17179).
Collinsia Torreyi Gray.
Eagle Lake Trail (17184).

Mimulus Breweri (Greene) Cov.
Eagle Lake Trail (17190); between Big Arroyo and Chagoopa Plateau (17686); Lost Canyon (17772).
Mimulus leptaleus Gray.
Little Five Lakes (17425); Chagoopa Plateau (17569).
Mimulus Lewisii Pursh.
The beautiful pink monkey-flower grew in the meadow at Pinto Lake but no specimen was collected.
Mimulus nephiticus Greene.
Between Little Five Lakes and Kaweah Gap (17617).
Mimulus moschatus Dougl.
Between Big Arroyo and Chagoopa Plateau (17696). Hans Leschke collected this on trail to Farewell Gap.
Mimulus nasutus Greene.
Between Mineral King and Timber Gap (17270); between Big Arroyo and Chagoopa Plateau (17429).
Mimulus primuloides Benth.
Little Five Lakes (17663).
Mimulus Tilingii Regel.
Mineral King (17104); between Big Arroyo and Chagoopa Plateau (17680).
Mimulus Tilingii Regel var. corallinus (Greene) Grant.
Little Five Lakes (17664).
Pedicularis attollens Gray. Elephant-heads.
Little Five Lakes (17395).
Pedicularis groenlandica Retz. Elephant-snouts.
Between Little Five Lakes and Kaweah Gap (17611).
Pedicularis semibarbata Gray.
Mineral King (17109); Little Five Lakes (17362); Mt. Kaweah (17442).
Penstemon Bridgesii Gray.
Mineral King (17199); between Chagoopa Plateau and Big Arroyo (17751).
Penstemon caesius Gray.
Between Big Arroyo and Chagoopa Plateau (17689).
Penstemon cephalophorus Greene.
Kaweah Gap (17632); Kaweah Meadows (17725). This is that form of the common whorled penstemon that is found in the southern Sierra Nevada.
Penstemon Menziesii Hook. var. Davidsonii (Greene) Piper.
Black Rock Pass (17347); Little Five Lakes (17417); Mt. Kaweah (17428). In my mind's eye, I can still see that most lovely mat of lavender penstemon on the rocks of Black Rock Pass with Parker Severson, camera and all, scrambling towards it!
Penstemon Newberryi Gray. Pride-of-the-Mountains.
Kaweah Gap (17631).
Penstemon parvulus (Gray) Krautter.
Mineral King (17076).
Penstemon Rothrockii Gray.
Between Big Arroyo and Chagoopa Plateau (17431).
Veronica alpina L. var. alterniflora Fern.
Mineral King (17202); Little Five Lakes (17409); Farewell Gap (17833).
Veronica americana Schwein.
Mineral King (17133).
Veronica serpyllifolia L.
Farewell Gap (17837).
Galium Aparine L.
Cliff Creek (17314).
Galium bifolium Wats.
Eagle Lake Trail (17185).

Galium pubens Gray.
Between Timber Gap and Cliff Creek (17299).
Galium pubens Gray var. scabridum Gray.
Between Mineral King and Timber Gap (17269); Cliff Creek (17315).
Galium sparsiflorum Wight.
Between Timber Gap and Cliff Creek (17300, 17301).
Kelloggia galioides Gray.
Mineral King (17084).
Lonicera conjugialis Kell.
Mineral King (17115).
Lonicera involucrata Banks. Twin-berry.
Eagle Lake Trail (17159); between Big Arroyo and Chagoopa Plateau (17681).
Sambucus racemosa L. Red Elderberry.
Kaweah Gap (17633). Maybe you didn't know it but this was the flower carried by the bride when Rodney duly "Sierranized" Frank and Marion Schoch's recent marriage.
Symphoricarpos acutus (Gray) Dieck. Sierra Snowberry.
Mineral King (17116); between Mineral King and Timber Gap (17266); Cliff Creek (17321).
Symphoricarpos Parishii Rydb.
Between Big Arroyo and Chagoopa Plateau (17687).
Valeriana californica Hel.
Mineral King (17826).
Heterocodon rariflorum Nutt.
Cliff Creek, ca. 8,000 ft. (17330).
Achillea lanulosa Nutt. Yarrow.
Mineral King (17234); Sky Parlor Meadow (17538); between Sawtooth Pass and Mineral King (17824).
Agoseris alpestris Greene.
Lost Canyon (17783).
Agoseris elata (Nutt.) Greene.
Mineral King (17252).
Agoseris gracilens (Gray) Ktze. ?
Cliff Creek (17306).
Agoseris retrorsa Greene.
Mineral King (17063).
Antennaria corymbosa E. Nels.
Sky Parlor Meadow (17536).
Antennaria media Greene.
Little Five Lakes (17662). Betty Hammerly called this common subalpine everlasting, "Match-plant", from the match-like appearance of the tiny heads on their little stalks.
Antennaria rosea (D.C. Eat.) Greene.
Mineral King (17111); between Little Five Lakes and Kaweah Gap (17620); Little Five Lakes (17762A).
Antennaria sp.
Mt. Kaweah (17481). This little everlasting belongs to the A. alpina group but differs from all I have seen.
I am grateful to Dr. Bassett Maguire for determining the following arnicas:
Arnica amplexifolia Rydb.
Mineral King (17066); between Big Arroyo and Chagoopa Plateau (17669).
Arnica latifolia Bong.
Between Big Arroyo and Chagoopa Plateau (17708, "intermediate to A. cordifolia"); near Little Five Lakes (17757).
Arnica mollis Hook.
Little Five Lakes (17367); Kaweah Meadows (17740).
Artemisia discolor Dougl.
Between Big Arroyo and Chagoopa Plateau (17684); Mineral King.

Artemisia Douglasiana Besser.
Farewell Gap Trail (17831)
Artemisia dracunculoides Pursh.
Mineral King (17197).
Artemisia norvegica Fries var. saxatilis (Besser) Jeps.
Timber Gap (17286, hairy); between Little Five Lakes and Kaweah Gap (17597, hairless, A. laevigata Standl.).
Artemisia Rothrockii Gray.
Chagoopa Plateau (17572).
Artemisia tridentata Nutt. Sagebrush.
Mineral King (17127); between Big Arroyo and Chagoopa Plateau (17710).
Aster Andersonii Gray.
Sky Parlor Meadow (17542).
Aster integrifolius Nutt.
Between Pinto Lake and Black Rock Pass (17339).
Balsamorhiza invenusta Cov.
East Fork of Kaweah River below Mineral King (17050).
Brickellia grandiflora (Hook.) Nutt.
Cliff Creek (17310).
Chaenactis alpina (Gray) M. E. Jones.
Between Big Arroyo and Chagoopa Plateau (17436).
Chaenactis Evermannii Greene.
Lost Canyon (17789).
Chrysopsis Breweri Gray.
Mineral King (17100); between Big Arroyo and Chagoopa Plateau (17428).
Cirsium Andersonii (Gray) Petrak.
Between Big Arroyo and Chagoopa Plateau (17682).
Cirsium californicum Gray.
East Fork of Kaweah River below Mineral King (17051).
Cirsium occidentale (Nutt.) Jeps. var.
Cliff Creek (17311); between Big Arroyo and Chagoopa Plateau (17573).
Cirsium tioganum (Congdon) Petrak.
Mt. Kaweah (17455).
Crepis acuminata Nutt.
Mineral King (17062).
Crepis nana Rich.
Mt. Kaweah (17490); Farewell Gap (17854).
Erigeron Breweri Gray.
Mineral King (17074); between Big Arroyo and Chagoopa Plateau (17705).
Erigeron compositus Pursh.
Black Rock Pass (17350); Mt. Kaweah (17485); Farewell Gap (17846).
Erigeron Coulteri Porter.
Between Big Arroyo and Chagoopa Plateau (17709).
Erigeron Elmeri Greene.
Cliff Creek (17325); Hamilton Lakes (17651).
Erigeron lonchophyllus Hook.
Mineral King (17226); Sky Parlor Meadow (17523).
Erigeron radicatus Hook.
Mt. Kaweah (17487).
Erigeron salsuginosus (Richards.) Gray.
Kaweah Meadows (17738).
Erigeron simplex Greene.
Timber Gap (17283); Little Five Lakes (17360); Mt. Kaweah (17461); between Little Five Lakes and Kaweah Gap (17599).
Eriophyllum confertiflorum (DC.) Gray.
Between Big Arroyo and Chagoopa Plateau (17430).

Eupatorium occidentale Hook.
Between Big Arroyo and Chagoopa Plateau (17691).
Gnaphalium Macounii Greene.
Between Big Arroyo and Chagoopa Plateau (17433).
Gnaphalium palustre Nutt.
Sky Parlor Meadow.
Hazardia Whitneyi (Gray) Greene.
Between Mineral King and Timber Gap (17278).
Helenium Bigelovii Gray. Bigelow's Sneezeweed.
Mineral King (17227); Little Five Lakes (17764).
Helenium Hoopesii Gray. Hoopes' Sneezeweed.
Mineral King (17198).
Hieracium albiflorum Hook.
Between Timber Gap and Cliff Creek (17288).
Hieracium gracile Hook. var. detonsum Gray.
Little Five Lakes (17407).
Hieracium horridum Fries.
Between Mineral King and Timber Gap (17268); Mt. Kaweah (17443).
Hulsea algida Gray.
Mt. Kaweah (17462).
Macronema discoideum Nutt.
Little Five Lakes (17369); Mt. Kaweah (17467). Ervin brought this back from that tiltilating expedition so vividly and amusingly described by Amby.
Madia glomerata Hook.
Between Mineral King and Timber Gap (17279).
Madia Wheeleri (Gray) Keck.
Mineral King (17078).
Madia yosemitana Parry.
Cliff Creek (17326).
Pyrrocoma apargioides (Gray) Greene.
Sky Parlor Meadow (17524).
Raillardella argentea Gray.
Lost Canyon (17785).
Raillardella scaposa Gray.
Little Five Lakes (17423).
Raillardella scaposa Gray var. Pringlei (Greene) Jeps.
Between Mineral King and Timber Gap (17265).
Scorzonella nutans Geyer.
Between Little Five Lakes and Kaweah Gap (17619).
Senecio Covillei Greene.
Little Five Lakes (17659).
Senecio Covillei Greene var. Scorzonella (Greene) Jeps.
Little Five Lakes (17766A).
Senecio Fremontii T. & G. var. occidentalis Gray.
Mt. Kaweah (17452); Farewell Gap (17859).
Senecio lugens Richards. var. exaltatus (Nutt.) Gray.
Mineral King (17057); between Big Arroyo and Chagoopa Plateau (17677).
Senecio oreopolus Greenm.
Mineral King (17148); between Pinto Lake and Black Rock Pass (17333); between Big Arroyo and Chagoopa Plateau (17720).
Senecio pauciflorus Pursh var. fallax Greenm.
Between Little Five Lakes and Kaweah Gap (17598).
Senecio serra Hook.
Mineral King (17248).
Senecio triangularis Hook.
Between Big Arroyo and Chagoopa Plateau (17706).

Solidago corymbosa Nutt.
Mineral King (17130); between Big Arroyo and Chagoopa Plateau (17707).
Solidago elongata Nutt.
Mineral King (17211).
Stephanomeria tenuifolia (Torr.) Hall.
Eagle Lake Trail (17191); Cliff Creek (17316).
Tanacetum canum D. C. Eat.
Black Rock Pass (17348); Mt. Kaweah (17444); Farewell Gap (17847).
Tetradymia canescens DC.
Timber Gap (17285); Chagoopa Plateau (17498).

For those who have read this far and who may be curious about the figures in parentheses, I might add that they are my field numbers. They are included because they are most useful when one wishes to refer from this report back to the field notes or the specimens.

-- CORRECTION --

On Page 12, please correct Erigonum to Eriogonum, a most regretable slip in one of my favorite genera!

THE LATEST NAME FOR THE SIPHONELLAS

As recently as May 15 of this year the siphonellas were given proper nominal recognition apart from the rest of the gilias. Joseph Ewan of the University of Colorado has called the group Linanthastrum and I am especially pleased to be able to report the Mineral King plant at this time by its new well-deserved name, Linanthastrum Nuttallii (Gray) Ewan.